July 1975 Number 371-Part I

Solar-Geophysical Data prompt reports

Data for June 1975–May 1975

Explanation of Data Reports Issued as Number 366 (Supplement) February 1975

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Solar - Geophysical Data

NO. 371 JULY 1975

Part I (Prompt Reports)

DATA FOR
JUNE 1975
MAY 1975

NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO

For obtaining bulletins on a data exchange basis, send request to: World Data Center A for Solar-Terrestrial Physics, NOAA, Boulder, Colorado 80302.

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To standardize referencing these reports in the open literature, the following format is recommended:

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SOLAR - GEOPHYSICAL DATA

No. 371

Issued in two parts

Hope I. Leighton, Editor

J. Virginia Lincoln, Director
Solar - Terrestrial Data Services Division

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Note: A = Part I, B = Part II.
362A 32 listed under Aug shows that data for August 1974 were contained in *Solar-Geophysical Data* Number 362 - Part I beginning on page 32.

Errata: The index page numbers published last month in SGD-370 for 370B (Part II), involving December and January data, were incorrect. Please make changes to correspond with this month's table.

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ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

JUNE 1975

SUMMARY OF THE GEOALERT WWA MESSAGES

Message serial number	Date of issue	Date of observation	Wolf number	10 cm solar flux	A index	Active Regions				Outstanding events	Forecasts			Alert Situation
						Location Lat-Long	No. of Flares Total	M	X		Date	Location Lat-Long	Desc*	
152	01	31	11	69	02	S08E66	0	0	0		01	S08E66	Q	SOLQUIET MAGALERT RECURRENCE MINOR 02/06
153	02	01	12	69	18	S08E51	0	0	0		02	S08E51	Q	SOLQUIET MAGALERT MINOR 02/06
154	03	02	13	71	23	S08E37	0	0	0		03	S08E37	Q	SOLQUIET MAGALERT MINOR 03/05
155	04	03	13	69	14	S08E25	0	0	0		04	S08E25	Q	SOLQUIET MAGALERT MINOR 04/05
156	05	04	13	68	15	S06E09	2	0	0		05	S06E09	Q	SOLQUIET MAGALERT MINOR 05/06
157	06	05	28	67	13	S05W01 N02W20	0	0	0		06	S05W01 N02W20	Q Q	SOLQUIET MAGNIL
158	07	06	00	66	13	-	-	-	-		07	-		SOLQUIET MAGQUIET
159	08	07	00	66	07	-	-	-	-		08	-		SOLQUIET MAGQUIET
160	09	08	00	66	07	-	-	-	-		09	-		SOLQUIET MAGQUIET
161	10	09	00	66	06	-	-	-	-		10	-		SOLQUIET MAGQUIET
162	11	10	00	67	06	-	-	-	-		11	-		SOLQUIET MAGALERT MINOR 12/15
163	12	11	14	66	17	N06W23	0	0	0		12	N06W23	Q	SOLQUIET MAGSTORM MINOR 12/16
164	13	12	00	66	21	-	-	-	-		13	-		SOLQUIET MAGALERT RECUR 12/21
165	14	13	12	66	16	N07W04	0	0	0		14	N07W04	Q	SOLQUIET MAGALERT INTERMITTENT 14/16
166	15	14	12	66	11	N06W23	0	0	0		15	N06W23	Q	SOLQUIET MAGALERT INTERMITTENT 15/16
167	16	15	13	66	11	N06W35	0	0	0		16	N06W35	Q	SOLQUIET MAGALERT INTERMITTENT 16/17
168	17	16	18	69	15	N06W48	1	0	0		17	N06W48	Q	SOLQUIET MAGNIL
169	18	17	18	68	08	N06W64	0	0	0		18	N06W64	Q	SOLQUIET MAGQUIET
170	19	18	13	68	10	N07W79	0	0	0		19	N07W79	Q	SOLQUIET MAGQUIET
171	20	19	13	69	09	N06W90	0	0	0		20	N06W90	Q	SOLQUIET MAGQUIET
172	21	20	00	70	06	-	-	-	-		21	-		SOLQUIET MAGQUIET
173	22	21	11	67	09	S12E16	0	0	0		22	S12E16	Q	SOLQUIET MAGQUIET
174	23	22	00	68	06	-	-	-	-		23	-		SOLQUIET MAGQUIET
175	24	23	17	71	04	S11W10	0	0	0		24	S11W10	Q	SOLQUIET MAGQUIET
176	25	24	33	74	02	S11W21 N07E76	0 0	0 0	0 0		25	S11W21 N07E76	Q Q	SOLQUIET MAGQUIET
177	26	25	33	75	03	S10W35 S05W34 N06E61	0 0 0	0 0 0	0 0 0		26	S10W35 S05W34 N06E61	Q Q Q	SOLQUIET MAGQUIET
178	27	26	43	77	09	S11W50 N08E48 S06W49	0 0 0	0 0 0	0 0 0		27	S11W50 N08E48 S06W49	Q Q Q	SOLQUIET MAGQUIET
179	28	27	39	79	03	S11W60 N06E34 S06W61	0 0 0	0 0 0	0 0 0		28	S11W60 N06E34 S06W61	Q Q Q	SOLQUIET MAGALERT 28/30
180	29	28	38	78	06	S09W75 N06E21 S06W75	0 0 0	0 0 0	0 0 0		29	S09W75 N06E21 S06W75	Q Q Q	SOLQUIET MAGALERT 28/03
181	30	29	26	77	16	S12W91 N06E12	0 1	0 0	0 0		30	S12W91 N06E12	Q	SOLQUIET MAGALERT 30/02
182	01	30	30	76	21	N06W03	2	0	0		01	N06W03	Q	SOLQUIET MAGALERT 01/02 MINOR

* Q=Quiet E=Eruptive A=Active P=Proton C=Caution D=Doubtful O.G.=Other Groups

RELATIVE SUNSPOT NUMBERS

ZURICH, R_Z

	1974 FINAL						1975 PROVISIONAL					
DAY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
1	79	37	8	61	18	0	38	0	0	0	25	7
2	87	23	8	53	27	0	30	22	7	0	33	11
3	98	12	16	46	39	9	28	28	14	0	29	8
4	93	17	37	60	45	16	19	27	11	0	28	7
5	95	18	40	85	36	17	18	20	14	21	28	7
6	93	26	44	83	25	8	23	26	14	0	20	7
7	78	32	38	84	22	7	32	34	7	15	16	0
8	59	34	32	97	14	0	29	29	18	17	0	0
9	40	43	63	107	7	0	37	22	19	9	0	0
10	26	48	74	114	24	9	31	18	20	13	9	0
11	22	54	80	118	27	21	30	13	20	0	8	9
12	22	67	80	92	24	31	31	18	15	0	0	8
13	28	69	74	76	16	34	32	9	15	0	0	0
14	38	66	67	63	8	33	11	6	17	0	7	0
15	49	59	64	48	16	35	28	8	18	0	7	8
16	54	57	68	41	20	40	17	8	30	0	8	19
17	52	52	71	28	20	36	16	0	30	0	6	17
18	53	44	66	16	18	34	20	0	24	0	8	12
19	47	43	51	9	34	43	20	0	20	0	0	16
20	30	32	31	11	40	40	18	7	16	0	0	0
21	55	28	13	12	40	40	16	8	9	8	0	7
22	58	34	0	9	44	37	16	0	8	0	8	0
23	60	34	7	7	44	28	15	0	0	7	8	12
24	57	28	11	7	37	26	7	12	0	8	7	20
25	59	25	11	8	29	9	7	9	0	7	0	24
26	60	8	13	16	25	8	7	0	13	7	0	33
27	54	8	19	30	23	8	0	0	7	26	7	38
28	51	8	23	27	13	20	7	0	0	19	13	36
29	42	14	38	22	7	16	7		0	16	8	23
30	41	8	58	22	7	19	7		7	20	0	22
31	38	15		16		13	0		8		8	
MEAN	55.8	33.6	40.2	47.1	25.0	20.5	18.7	11.6	12.0	6.2	8.7	11.4

1974 yearly mean = 34.5

DAILY SOLAR FLUX AT 2800 MHz
OTTAWA ARO

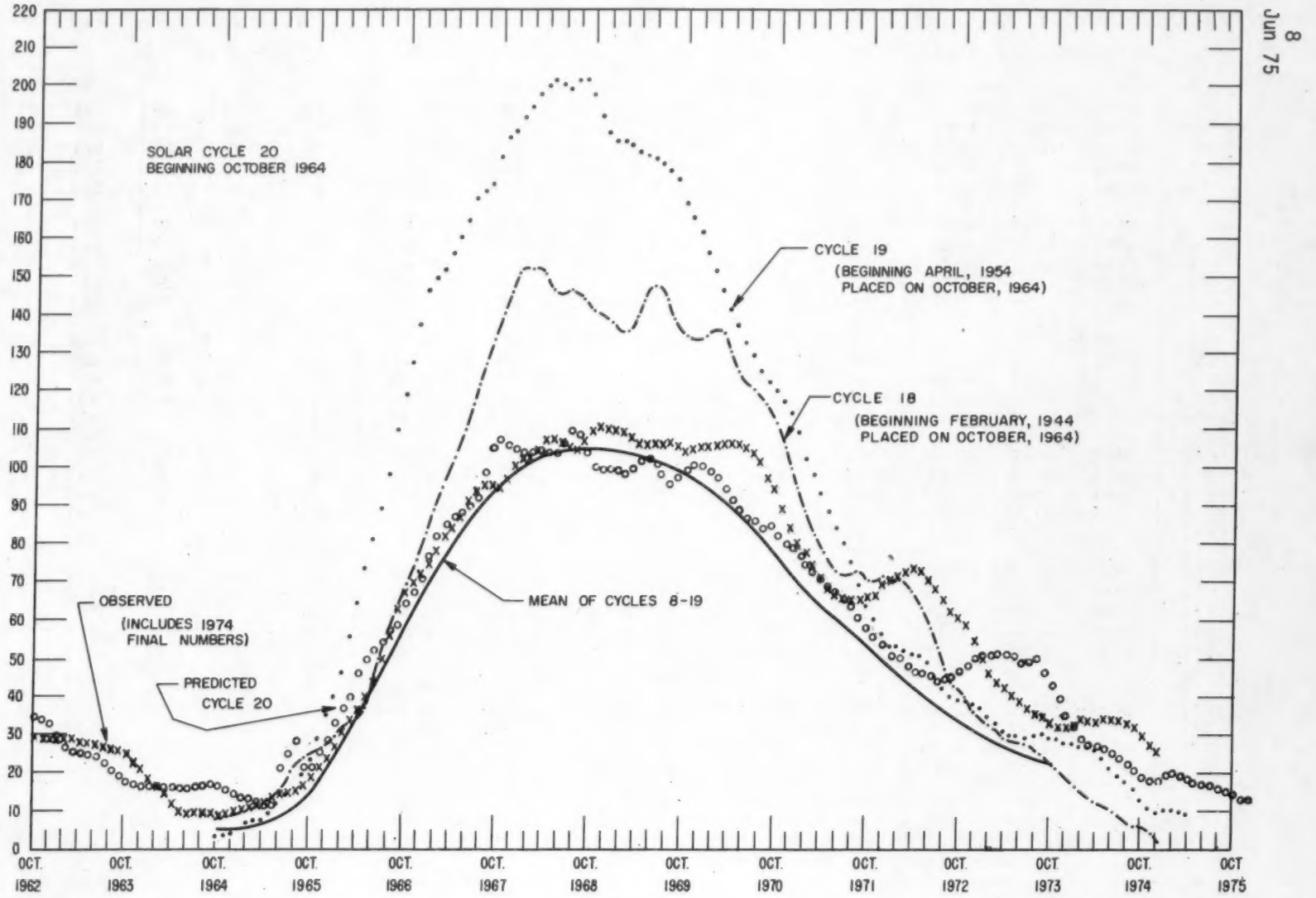
FLUX ADJUSTED TO 1 A.U., S_a

DAY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
1	105.4*	85.1	77.8	93.1	90.2	79.7	78.1	70.8	70.7	70.2	76.3	71.4
2	112.7*	85.2	79.4	94.6	92.0	78.7	75.8	72.3	72.4	71.2	81.1	73.0
3	118.5*	83.0	79.2	93.4	96.2	76.7	77.1	74.3	73.4	72.2	79.6	78.8
4	127.8*	85.8	81.0	100.5	99.5	74.7	74.4	75.4	72.8	73.0	79.6	70.4
5	125.6*	86.5	81.5	113.3*	97.6*	73.2	73.7	76.5	71.3	73.7	78.4	69.3
6	121.5	88.8	82.2	115.8	92.3	71.9	73.8	81.1	72.4	73.7	75.9	68.2
7	110.9*	85.8	85.4	114.5*	85.6	71.1	75.7	79.4	71.9	74.3	73.6	68.1
8	104.7*	89.4	93.4	125.2	82.8	69.6	77.7	78.8	72.5	73.6	71.9	67.5
9	95.5	87.5	96.0	128.9	78.9	69.6	79.9	77.1	73.8	73.4	70.6	67.7
10	88.2	88.3	102.8	129.3*	78.4	70.4	80.5	76.7	73.3	72.4	70.1	68.8
11	83.1	94.4	104.6	137.5*	77.3	76.2	81.2	74.8	73.0	72.3	69.8	68.1
12	83.3	99.4	105.6	144.1	79.1	77.9	82.4	74.9	74.2	70.8	69.6	68.4
13	83.3	95.2	106.8*	126.6	76.1	78.0	80.4	73.7	75.6*	70.7	69.1	67.9
14	83.3	93.2	104.1	113.2*	77.7	78.2	77.7	72.8	75.0	69.7	68.7	68.5
15	85.5	92.1	103.6	103.7*	80.0	83.2	77.4	69.7	73.4	69.7	68.0	68.9
16	91.3	96.6	102.0*	94.9	82.5	88.3	76.5	71.4	76.0	69.2	68.5	71.4
17	91.0	98.8	100.3	83.8	84.6	88.3	74.7	69.3	75.3	69.6	68.3	70.2
18	86.5	95.1*	100.0	81.0	88.5	90.3	75.8	68.3	74.2	68.3	68.7	70.2
19	87.1	88.8	91.7	75.2	96.0	91.9	74.1	70.0	72.9	67.5	68.9	71.0
20	86.7	82.6	85.9*	75.5	95.6	87.3	73.8	69.5	71.9	68.0	68.6	72.5
21	90.1	81.2*	82.7	73.9	96.2	86.0	74.5	68.9	71.2	68.2	69.7	68.7
22	95.3*	80.6	81.0	72.5	98.7	84.4*	73.6	68.3	69.3	67.8	70.8	69.9
23	98.1	81.0	74.6	74.0	98.1	83.0	72.7	68.3	67.6	68.7	70.6	72.9
24	92.1*	77.4	72.8	74.7	95.9	80.1	71.8	68.6	67.4	69.3	70.6	75.9
25	89.1	75.7	72.8	76.9	94.5	78.9	70.3	69.4	67.5	71.6	70.2	77.7
26	93.1	73.8	75.4	80.7	92.2	75.8	70.5	68.8	68.6	72.1	69.0	79.8
27	87.9	72.7	77.0	80.0	90.8	74.3	70.1	69.4	67.3	74.4	70.5	81.5
28	84.5	71.8	80.7	81.6	86.6	73.7	70.7	68.6	67.8	74.8	70.6	80.7
29	85.2	72.4	80.7	81.6	83.8	74.1	70.4		69.0	73.2	70.0	79.4
30	85.9	74.2	81.5	82.7	82.0	74.5	70.5		69.0	73.4	70.0	78.8
31	87.4	75.6		86.7*		76.1	70.1		70.5		71.1	
MEAN	95.5	85.1	88.7	97.1	88.3	78.6	75.8	72.4	71.7	71.2	71.6	71.9

DAILY SOLAR INDICES

JUNE 1975

JUN 1975	YEAR DAY	BARTELS 27-DAY CYCLE NUMBER	SUNSPOT NUMBERS		OBSERVED FLUX	SOLAR FLUX ADJUSTED TO 1 A.U.								
			R_Z	$R_{A'}$	OTTAWA 2800	AFCRL 15400	AFCRL 8800	AFCRL 4995	OTTAWA 2800	AFCRL 2695	AFCRL 1415	AFCRL 606	AFCRL 410	AFCRL 245
1	152	18	7	9	69.4		253	115	71.4	73.9	45.0	35.1	21.2	6.9
2	153	19	11	10	70.9	510	257	114	73.0	67.5	43.7	33.2	20.8	7.4
3	154	20	8	8	68.8	514	262	116	70.8	69.5	44.4	33.2	21.0	7.5
4	155	21	7	8	68.4	513	265	117	70.4	69.7	44.9	33.6	19.7	7.2
5	156	22	7	9	67.3	505	265	115	69.3	68.3	42.3	32.5	20.9	6.9
6	157	23	7	3	66.2			113	68.2	65.5	43.3	35.5	19.3	7.1
7	158	24	0	0	66.1	511	261	111	68.1	65.4	41.8	32.7	20.1	7.4
8	159	25	0	0	65.5	517	266	112	67.5	66.8	43.4	33.7	19.9	7.3
9	160	26	0	0	65.7	518	264	110	67.7	66.4	41.9	33.8	19.3	6.5
10	161	27	0	0	66.7	514	259	111	68.8	66.5	41.4	34.0	20.6	7.1
11	162	1	9	4	66.1	509	261	111	68.1	65.2	41.0	34.9	19.7	7.4
12	163	2	0	2	66.3	514	258	110	68.4	66.6	42.2	32.8	17.2	9.0
13	164	3	0	0	65.8	518	256	111	67.9	65.2	42.3	31.8	19.7	7.2
14	165	4	0	0	66.4	516	262	112	68.5	66.2	42.0	32.6	17.0	7.3
15	166	5	8	6	66.8	511	262	112	68.9	65.8	40.6	33.4	19.3	7.3
16	167	6	19	16	69.2	512	262	114	71.4	67.0	41.9	32.5	20.0	7.0
17	168	7	17	14	68.0	517	262	114	70.2	66.4	42.4	31.5	19.9	7.8
18	169	8	12	11	68.0	515	260	112	70.2	65.5	40.9	31.5	19.9	7.8
19	170	9	16	13	68.7	515	263	114	71.0	66.5	42.3	32.1	20.4	7.6
20	171	10	0	3	70.2	519	265	116	72.5	68.1	43.5	33.1	20.5	7.3
21	172	11	7	2	66.5	513	263	113	68.7	64.3	41.2		20.4	7.8
22	173	12	0	0	67.7	511	261	112	69.9	65.6	41.1		21.9	7.6
23	174	13	12	11	70.6	513	263	113	72.9	68.1	42.9	33.8	21.2	8.2
24	175	14	20	19	73.5	522	268	118	75.9	70.4	45.3	34.6	21.5	7.5
25	176	15	24	24	75.2	521	275	119	77.7	72.8	45.5	35.6	20.8	7.7
26	177	16	33	30	77.2	520	279	121	79.8	74.3	47.0	35.8	21.4	8.1
27	178	17	38	34	78.8	518	277	123	81.5	77.0	50.0	36.3	20.9	7.9
28	179	18	36	31	78.0	525	278	121	80.7	75.5	51.3	37.8	25.5	12.9
29	180	19	23	24	76.6	516	277	122	79.4	72.4	53.9	38.1	26.1	11.7
30	181	20	22	18	76.2	518	283	123	78.8	75.2	48.4	36.5	22.6	9.9
MEAN			11.4	10.3	69.7	515	265	115	71.9	66.6	43.9	34.0	20.6	7.9



8 Jun 75

PREDICTED AND OBSERVED SUNSPOT NUMBERS

SMOOTHED OBSERVED AND PREDICTED SUNSPOT NUMBERS

CYCLE 20

MONTH	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1964										9.6	10.2	11.0
1965	11.7	12.0	12.5	13.6	14.6	15.0	15.5	16.4	17.4	19.7	22.3	24.5
1966	27.7	31.3	34.5	37.4	40.7	44.6	50.3	56.6	63.1	67.6	70.2	72.7
1967	75.0	78.0	82.2	84.6	87.4	91.3	94.1	98.3	95.3	95.0	97.1	100.6
1968	102.6	102.9	104.7	107.2	107.6	106.6	105.2	104.0	107.0	109.9	110.6	110.1
1969	110.0	109.6	108.0	106.4	106.2	106.1	105.0	106.4	105.4	104.1	104.6	104.9
1970	105.6	106.0	106.2	106.1	105.0	105.3	103.0	101.0	97.2	93.9	89.4	84.1
1971	80.4	77.0	74.4	70.9	68.1	66.7	65.4	64.6	65.0	66.2	66.0	69.4
1972	70.0	71.2	72.4	73.4	72.9	70.5	68.2	65.5	62.2	60.6	58.7	55.1
1973	50.9	46.5	44.2	42.7	40.7	39.1	37.5	36.1	34.4	32.6	31.0	31.5
1974	32.7	34.4	34.0	33.9	34.6	34.5	34.0	33.1	32.1	30.3	27.6	25.2
1975	24.0 (11)	22.5 (3)	21.4 (4)	20.1 (5)	18.7 (6)	17.0 (8)	17.1 (10)	(16.5) (--)	(15.6) (--)	(15.0) (--)	(14.3) (--)	(13.7) (--)

For each month, the upper figure is the observed or predicted Zürich smoothed sunspot number. The lower figure in parenthesis is the corresponding absolute value of the 90% prediction interval, an indication of the uncertainty above and below the predicted number. Observed numbers are those with no prediction intervals. The observed smoothed sunspot numbers are based on final Zürich numbers through 1974.

The predicted sunspot numbers are derived from a regression analysis based on cycles 8 through 19. Tests indicate that earlier cycles are from a different statistical population. From July 1968 - February 1970 a regression analysis based on cycles 1 through 19 was used because it had not then been proven that two populations exist.

SOLAR FLARES

Partial listing including sub-flares.

JUNE 1975

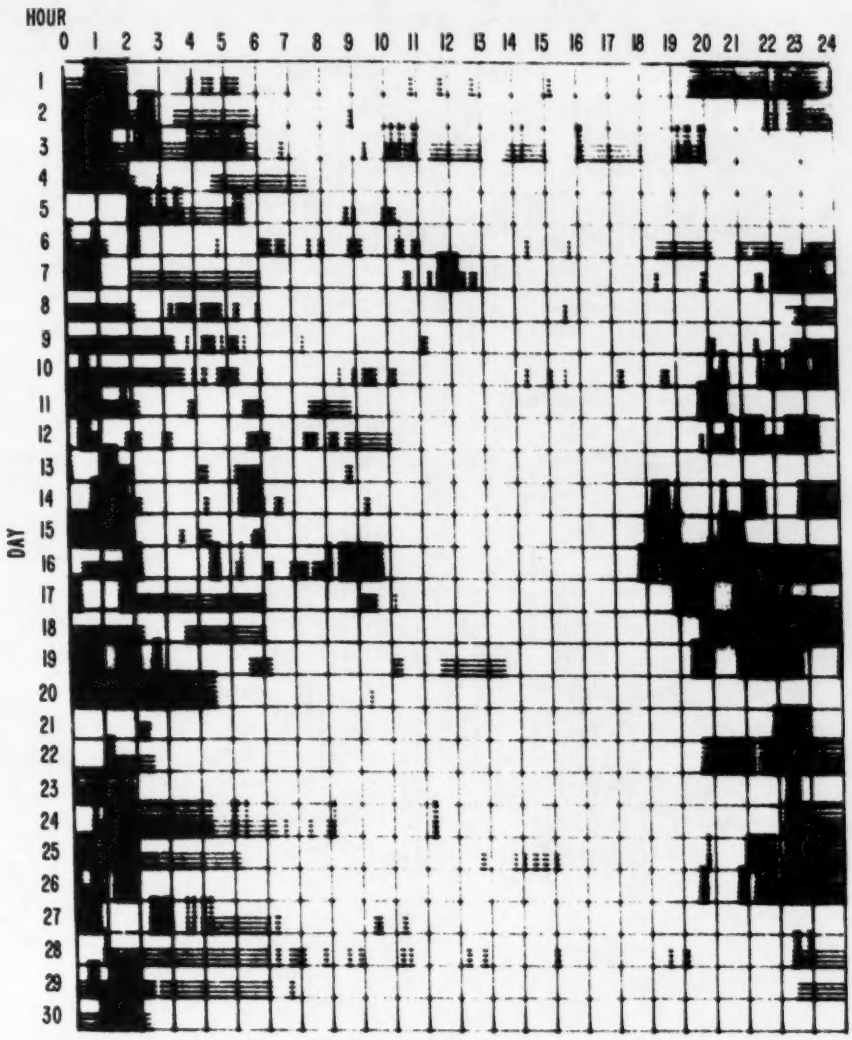
OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		CONF.	TYPE	TIME — UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.	MAX. WIDTH Hz	MAX. INT. %	
ATHN	03	1001	1005	1003	N11	W 8	.246		3.4	4	SN	5	C		16				DE
RAMY	04	1023	1042	1028	S 9	E25	.430		6.3	19	SF	4	C		45				DE
ATHN	04	1028	1036	1031	S11	E26	.452		6.4	8	SF	3	V		48				F
ATHN	04	1028	1036	1031	S11	E26	.452		6.4	8	SF	3	C		48				F
RAMY	04	1700	1719	1702	S 8	E18	.317		6.1	19	SF	3	C		36				F
BOUL	04	1700	1708	1703	S 8	E21	.365		6.3	8	SF	3	C	1703	32	.3			
ATHN	04	1706E	1711	1707U	S 9	E28	.353		6.2	5D	SF	2	V		64				F
ATHN	04	1706E	1711	1707U	S 9	E20	.353		6.2	5D	SF	2	C		64				F
ATHN	11	0633	0642	0635	S21	E31	.567		13.6	9	SF	4	C		32				
ATHN	11	0633	0642	0635	S21	E31	.567		13.6	9	SF	4	V		32				
CATA	11	0635E	0650D	0640	S14	E35	.586		13.9	15D	SF			0640	28	.4		(132)	
ATHN	11	1156	1201	1158	S15	E31	.536		13.8	5	SF	3	V		16				F
ATHN	11	1156	1201	1158	S15	E31	.536		13.8	5	SF	3	C		16				F
CATA	15	1015E	1035D	1025	N06	W28	.498		13.3	20D	SF			1025	28	.3		(148)	
CATA	15	1215	1250D	1225	N07	W31	.545		13.2	35D	SF			1225	56	.7		(123)	
CATA	15	1305E	1315D	1305	N07	W31	.545		13.2	18D	SF			1315	56	.7		(135)	
CATA	15	1325E	1430D	1335	N07	W32	.559		13.2	65D	SF			1335	28	.3		(129)	
CATA	16	0725	0738	0725	N05	W42	.683		13.2	5	SN			0725	56	.8		(151)	
CATA	16	0810	0820	0815	N05	W43	.695		13.1	10	SN			0815	56	.8		(155)	
HURB	16	1157E	1201D		N09	W42	.695		13.3	4D	SB						24.90		T
CATA	19	0620E	0700D	0635	N05	W84	.995	13722	13.0	40D	1F			0635	56			(129)	
CATA	19	1035E	1115	1105	S08	W73	.954		14.0	40D	SF			1105	56			(129)	
CATA	19	1035E	1115	1105	N08	W84	.996	13722	13.1	40D	1F			1105	56			(120)	
HURB	19	1215E	1413D	1238	S09	W78	.937	13729	14.3	118D	1B						29.70		
CATA	19	1250	1250	1250	S10	W74	.958	13729	14.0		1F			1250	84			(135)	
CATA	19	1250	1250	1250	N06	W86	.998		13.1		SF			1250	28			(129)	
CATA	20	1050E	1120D	1055	S11	W90	1.000	13729	13.7	30D	1F			1055	56			(126)	
CATA	20	1425	1510	1435	S08	W90	1.000	13729	13.9	45	1N			1435	84			(162)	
BOUL	20	1432	1503	1435	S12	W90	1.000		13.9	31	1N	3	C	1435	64	2.5			
CATA	20	1525	1630	1610	S10	W90	1.000	13729	13.9	65	2N			1610	81			(155)	
MCMA	20	1527	1545D	1534	S12	W90	1.000	13729	13.9	18D	SF		C	1534					
BOUL	20	1528	1550	1535	S12	W90	1.000		13.9	22	SN	3	C	1535	43	1.7			
BOUL	20	1725	1755	1732	S12	W90	1.000		14.0	30	1N	3	C	1732	54	2.1			
RAMY	21	1740	1757	1742	S 8	E23	.391		23.5	17	SF	3	C		18				DE
HURB	23	0558E	0614D	0601	S10	E01	.084		23.3	16D	SF						20.10		D
CATA	23	0605	0645D	0615	S11	W81	.985		17.2	40D	SN			0615	56	.6		(174)	
HURB	23	0628E	0633D	0631	S10	E01	.084		23.3	5D	SF						19.70		
CATA	24	1315E	1340D	1325	N05	E80	.986		30.6	25D	SF			1325	28			(138)	
CATA	24	1430E	1445D	1435	N05	E79	.983		30.5	15D	SF			1435	28			(138)	
UPIC	25	1350E	1415	1355	S11	W32	.532		23.2	25D	SF		P	1355	82	5.0			
HURB	26	0714E	0726D	0714	N10	E62	.896	13738	31.0	12D	1F						21.10		
HURB	26	0826E	0836D	0832	S09	W46	.716		22.9	10D	SF						19.70		
HURB	26	1055E	1122D	1105	S09	W46	.716		23.0	27D	SF						26.10		
HURB	27	0550E	0610D	0552	S12	W52	.785		23.3	20D	SN						20.50		T
HURB	27	0629E	0708D	0629	S10	W53	.795		23.3	31D	SN						24.70		
ARCE	27	0925E	0957		S10	W56	.825		23.2	32D	SB		C	0940	22	.4			
HURB	27	1057E	1126D	1058	S10	W58	.844	13736	23.1	29D	1N						25.60		T
CATA	27	1400E	1530	1410	S05	W60	.864		23.1	90D	SN			1410	56	1.2		(155)	
CATA	27	1410E	1420D	1410	N08	E39	.659		30.5	10D	SN			1410	28	.4		(155)	
BOUL	27	1815	1837	1817	S10	W63	.887		23.0	22	SF	3	C	1817	11	.2			
ARCE	28	0800E	1000D		S10	W70	.936		23.1	120D	SN		C	0923	51	1.2			K
MCMA	28	2007	2028	2011	N04	E33	.564	13738	31.3	21	SN		C	2011	40	.5			EL
BOUL	29	1536	1601	1544	N 7	E15	.337		30.8	25	SF	3	C	1544	21	.2			
RAMY	29	1536	1606	1544	N 8	E17	.372		30.9	30	SF	2	C		72				DE
MCMA	29	1537	1605	1540	N07	E17	.362	13738	30.9	28	SB		C	1540	50	.5			E
ATHN	29	1539	1556	1543	N 8	E16	.360		30.9	17	SN	4	V		64				F
ATHN	29	1539	1556	1543	N 8	E16	.360		30.9	17	SN	4	C		64				F
CATA	29	1545	1630	1550	N06	E17	.353		30.9	45	SN			1550	84	.9		(166)	
ATHN	30	0424	0438	0426	N 7	E 7	.253		30.7	6	SF	4	C		32				DE
TEHR	30	1009	1023	1020	N12	E11	.358		31.2	14	SF	3	V		1 90				F
TEHR	30	1015E	1220D	1017U	N12	E10	.349		31.2	125D	SF	3	C		60				
LOCA	30	1030E	1045	1038	N07	E05	.239	13738	30.8	15D	1N		V	1030	1 01	1.0			
RAMY	30	1148	1204	1153U	N 6	E 2	.209		30.6	16	SF	3	C		27				DE Z
MCMA	30	1152	1209	1154	N07	E05	.239	13738	30.9	17	SN		C	1209	30	.3			E
RAMY	30	1309	1316	1314U	N 8	E 1	.240		30.6	7	SF	4	C		33				DE

NOTE: The measured area is now reported in millionths of the solar disk.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

JUNE 1975



Observatories included in total patrol:

Arcetri	Bucharest	Hurbanovo	Manila	Ramey
Athenes	Catania	Kodaikanal	McMath-Hulbert	Tehran
Boulder	Herstmonceux	Locarno	Mitaka	Upice
				Wendelstein

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

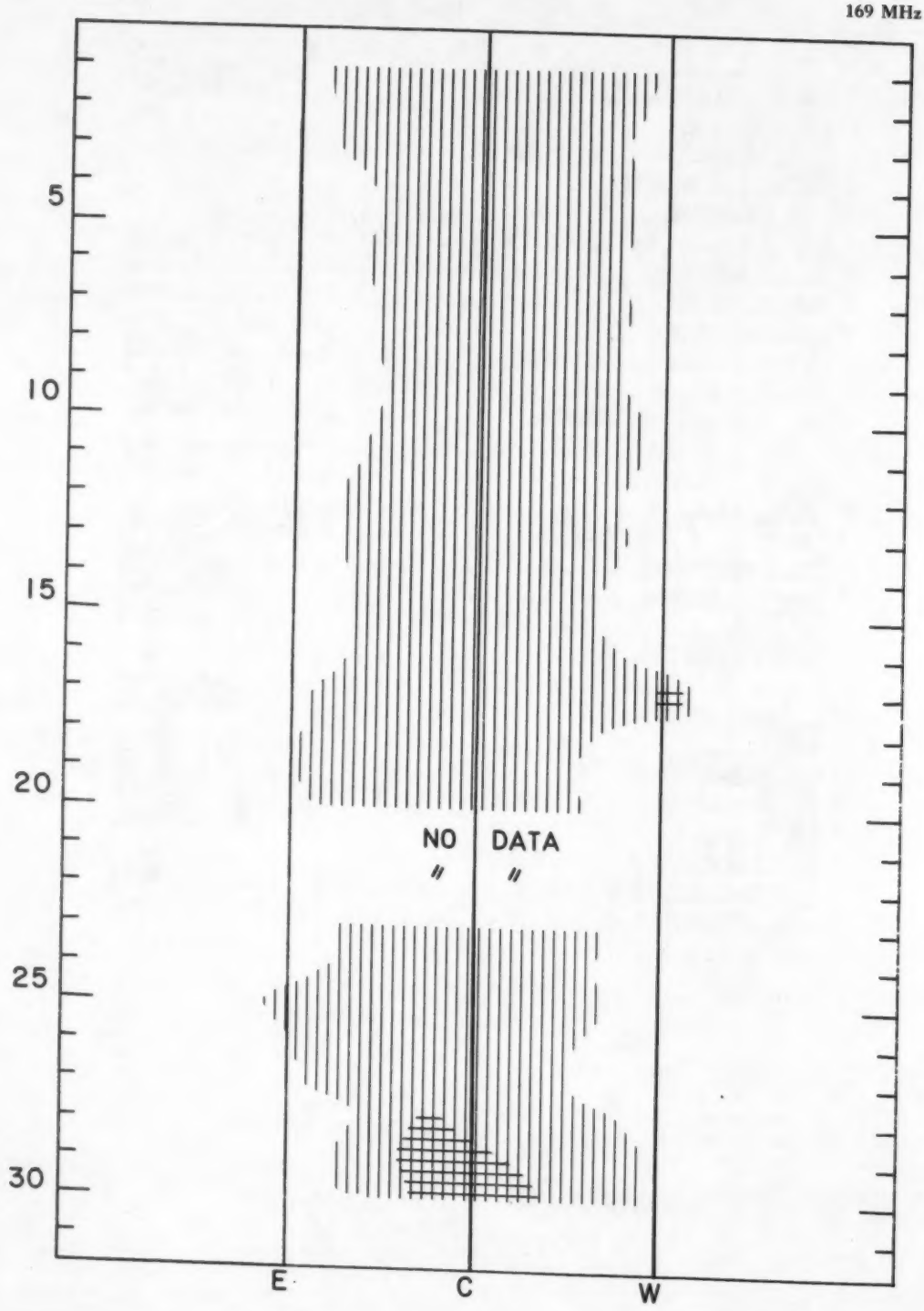
12
Jun 75

SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATION

JUNE 1975

Nançay

169 MHz

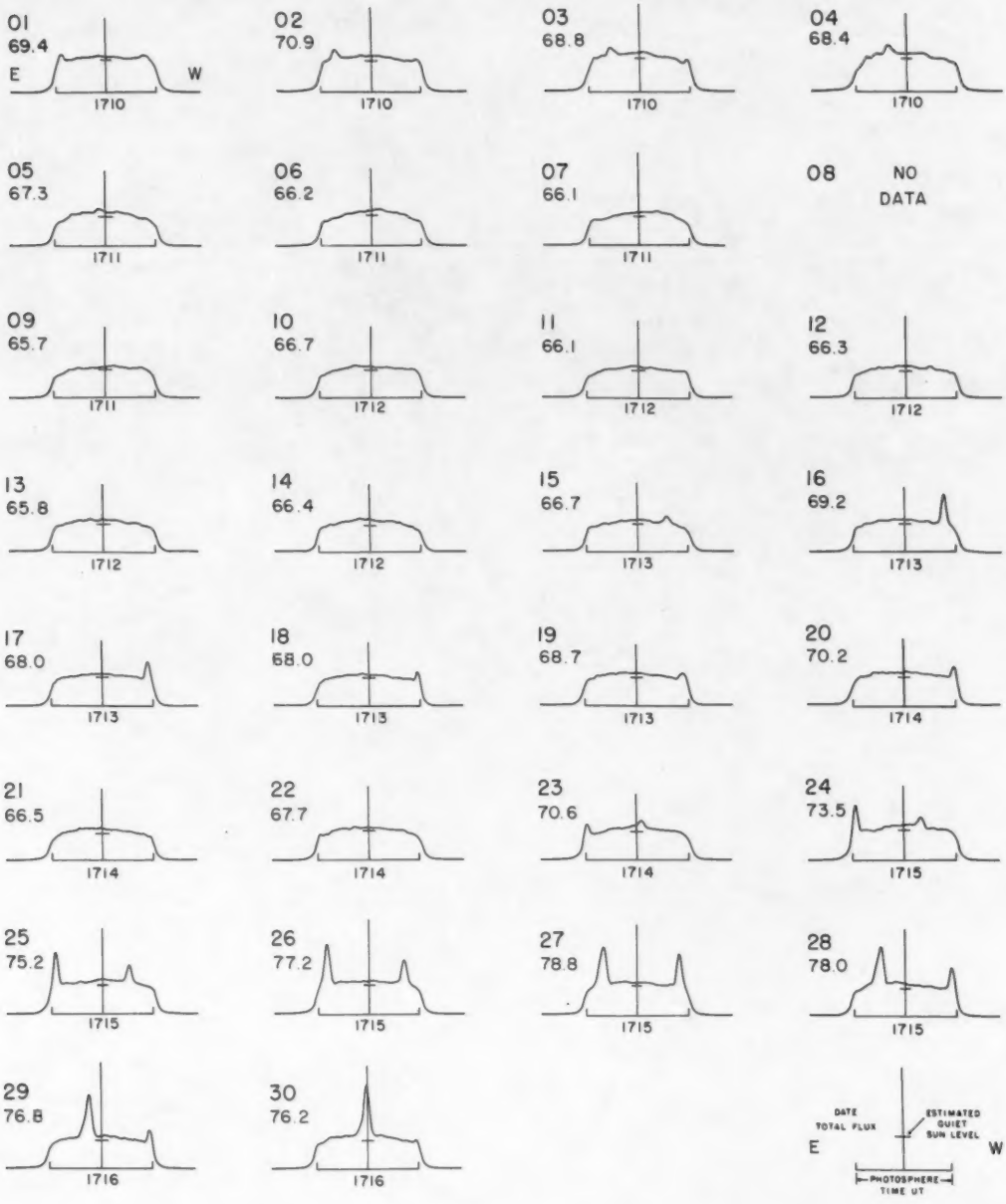


EAST - WEST SOLAR SCANS

June 1975

ALGONQUIN RADIO OBSERVATORY
CANADA

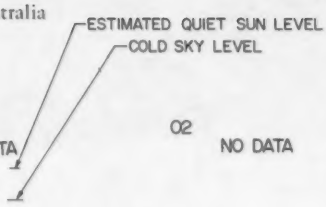
10.7 cm
Fan Beam with 1.5 minutes of arc
E - W Resolution



JUNE 1975

Fleurs, Australia

21 cm
Fan-Beam with 2 minutes of arc
E-W Resolution



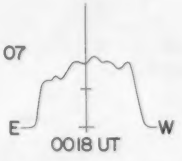
01 NO DATA

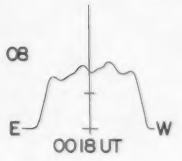
02 NO DATA

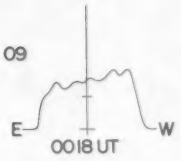
03 NO DATA

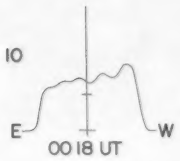
05 NO DATA

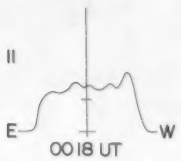
06 NO DATA

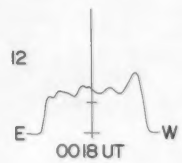




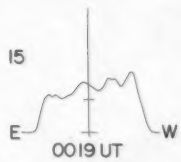


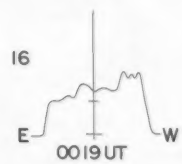


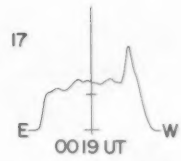


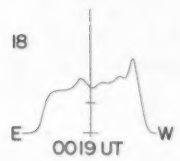


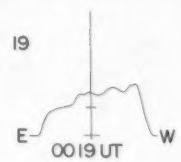
13 NO DATA







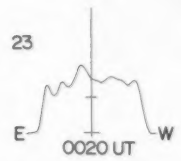




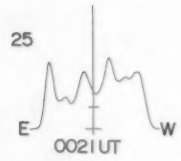
20 NO DATA

21 NO DATA

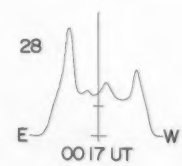
22 NO DATA

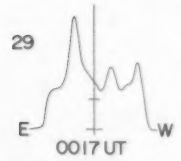


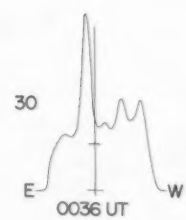
24 NO DATA



26 NO DATA



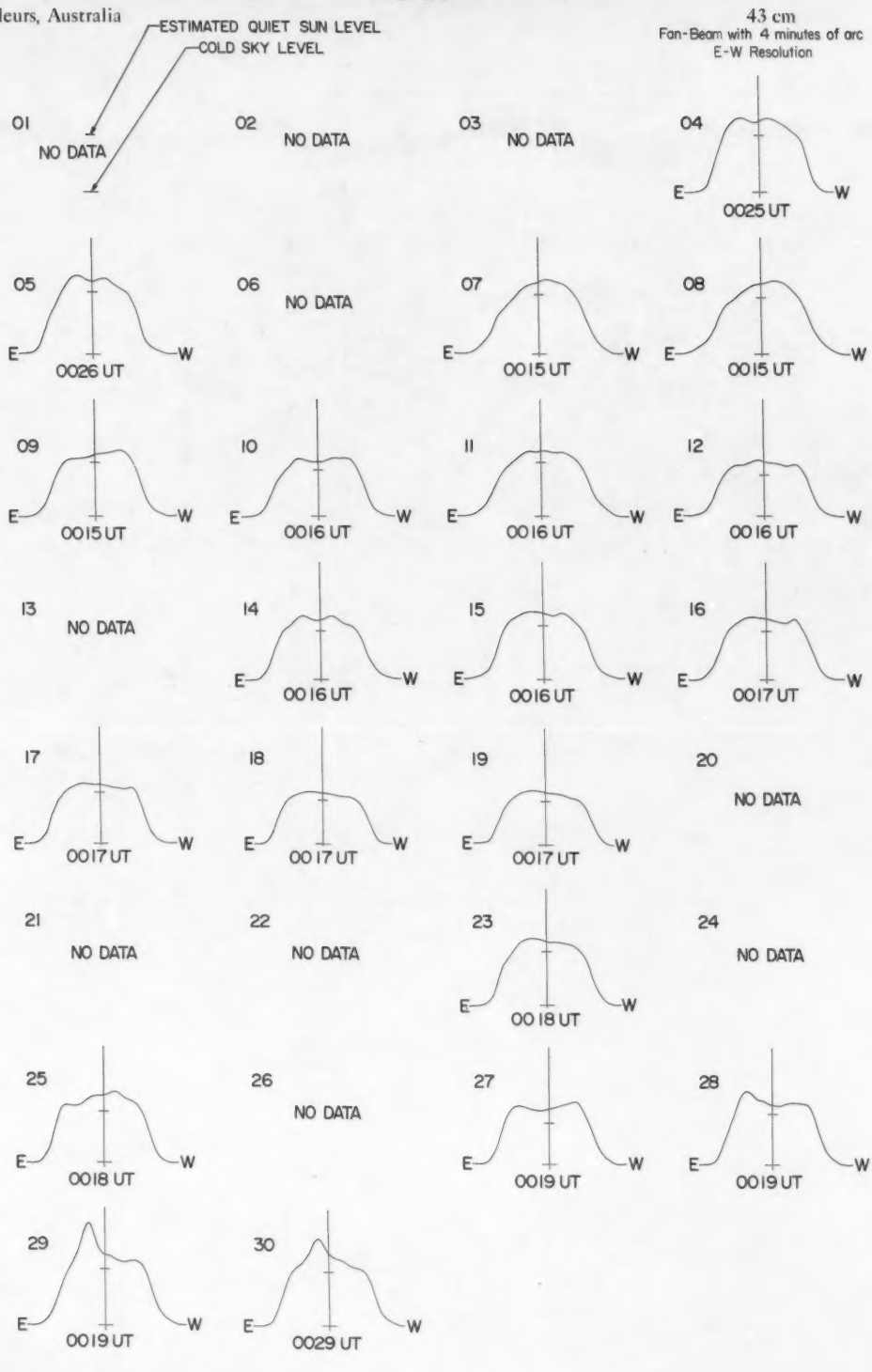




JUNE 1975

Fleurs, Australia

43 cm
Fan-Beam with 4 minutes of arc
E-W Resolution



SOLAR RADIO EMISSION
SELECTED FIXED FREQUENCY EVENTS

JUNE 1975

	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
2	2695	BOUL	1 S	2024.5	2027	7	7	2		
9	2695	BOUL	2 S	2126	2127.5	2	3	1		
10	2695	BOUL	1 S	2347	2347.5	2.5	3	1		
18	2695	BOUL	1 S	1727	1727.5	1	3	1		
	2695	BOUL	8 S	1733.5	1734	1	6	2		
	2695	BOUL	8 S	1756.5	1757	1.5	4	1		
	2695	BOUL	1 S	1801.5	1802	1	2	1		
	2695	BOUL	45 C	1825.5	1828	2.5	3	1		
24	2695	BOUL	8 S	1725.5	1726	1.5	2	5		
26	2800	OTTA	1 S	1801	1801.9	3	1.2	0.5		
28	2800	OTTA	20 GRF	2008	2013	40	1.8	0.9		
	2800	OTTA	240 R	2125	2200	35	1.6	0.8		
	2800	OTTA	24P R	2200		230 D	1.6			
29	2800	OTTA	21A GRF	1530	1542	60	1.4	0.7		
	2695	BOUL	1 S	1539	1541.5	4.5	4	1		
	2800	OTTA	-A S	1540	1541	2	1.8	0.9		
	2800	OTTA	8 S	1541	1541	0.1	3			
	2800	OTTA	20 GRF	1847		11	0.8	0.6		
	2800	OTTA	20 GRF	2123	2125	20	1	0.5		
30	2800	OTTA	8 S	1436.5	1436.5	0.10	2.2			
	2695	BOUL	45 C	1715	1716	3	5	2		
	2695	BOUL	8 S	1728	1730	2.5	10	3		
	2800	OTTA	8 S	1830.2	1830.2	0.3	2.4	1.2		

Observatories:

BOUL = Boulder MANI = Manila OTTA = Ottawa ARO PENT = Penticton SGMR = Sagamore Hill

Explanation of Type Code:

1 Simple 1	6 Minor	22 Simple 3F	27 Rise and Fall	32 Absorption	44 Noise Storm in Progress
2 Simple 1F	7 Minor +	23 Simple 3AF	28 Precursor	40 Fluctuation	45 Complex
3 Simple 2	8 Spike	24 Rise	29 Post Burst Increase	41 Group of Bursts	46 Complex F
4 Simple 2F	20 Simple 3	25 Rise A	30 Post Burst Increase A	42 Series of Bursts	47 Great Burst
5 Simple	21 Simple 3A	26 Fall	31 Post Burst Decrease	43 Onset of Noise Storm	48 Major
					49 Major +

SOLAR WIND
Interplanetary Scintillations
JUNE 1975

UCSD 74 MHZ SCINTILLATIONS

DAY	3C48 VEL	3C48 ERR	3C144 VEL	3C144 ERR	3C147 VEL	3C147 ERR	3C161 VEL	3C161 ERR	3C237 VEL	3C237 ERR	3C273 VEL	3C273 ERR	3C298 VEL	3C298 ERR	3C459 VEL	3C459 ERR
1					561	72	572	35								
2	592	7			829	154	738	88	307	39	464	11	659	146		
3	533	23			437	158	676	53	521	90					532	62
4	517	48			349	35	632	65					282	18		
5	546	48			549	58	639	14					385	110		
6					670	*	640	*								
7	437	11			472	59	658	80								
8	500	35			338	91	599	22			334	*				
9	468	11					544	65	363	28						
10	479	59			415	108	472	29	377	106						
11	364	64			485	10	458	19			379	55				
12	597	68					555	29			533	53	433	28		
13	637	13			585	95	628	58					268	8		
14	716	37			568	39	489	39								
15	704	25			656	199	479	20	599	36	538	50				
16	703	16			580	12	581	8			567	47	485	17		
17	686	90					559	139	332	72	517	16	438	19		
18	553	37											554	73		
19	616	32			458	59	537	59	276	12						
20	604	29							310	24	360	32				
21																
22	805	17					505	19								
23	830	50											293	99		
24	622	41			610	136							348	94		
25	676	54					559	85			351	9				
26	401	23			508	46			409	24			420	140		
27	522	43									419	38				
28									416	20	387	43				
29											415	30	325	24		
30	489	*														

JUNE	5 UT	LAT	DIST	DLON	15 UT	LAT	DIST	DLON	25 UT	LAT	DIST	DLON
3C48	17.	26.	0.70	38.	16.	20.	0.80	32.	16.	16.	0.88	25.
3C144	21.	-15.	0.16	-81.	20.	-55.	0.03	85.	19.	0.	0.18	80.
3C147	20.	49.	0.48	-42.	19.	62.	0.45	-22.	19.	63.	0.46	16.
3C161	22.	-45.	0.59	-32.	22.	-54.	0.52	-22.	21.	-58.	0.49	1.
3C237	2.	-3.	0.97	-17.	1.	-3.	0.92	-23.	0.	-4.	0.84	-32.
3C273	4.	0.	1.14	-14.	3.	0.	1.10	-16.	2.	1.	1.05	-17.
3C298	6.	3.	1.22	-10.	5.	4.	1.19	-12.	4.	5.	1.16	-13.
3C459	14.	4.	1.01	17.	14.	5.	1.06	16.	13.	6.	1.10	15.

* indicates data for which no error estimate is available, because only two antennas were operating.

PIONEER VI

JUNE 1975

Date June 1975	DSN Coverage (UT)	Data Time (UT)	ESP (°)	SOLAR WIND				COSMIC RAY PROTONS[3] (particles/sec)		
				AMES[1]		MIT[2]				
				U_{H^+} † (km/sec)	TAU (days)	U_{H^+} (km/sec)	N_{H^+} (H^+/cc)	6-13 (Mev*)	13-175 (Mev**)	>175 (Mev)
1	2034-2350	2100	136.8	339	10.5	344	10.8	0.98	0.13	1.22
		2200		339		361	13.8	1.11	.15	1.31
		2300		383		365	20.9	1.2	.12	1.19
		2400		339		361	18.6	1.02	.13	1.22

PIONEER VII

JUNE 1975

Date June 1975	DSN Coverage (UT)	Data Time (UT)	ESP (°)	SOLAR WIND				COSMIC RAY PROTONS[3] (particles/sec)		
				AMES[1]		MIT[2]				
				U_{H^+} † (km/sec)	TAU (days)	U_{H^+} (km/sec)	N_{H^+} (H^+/cc)	6-13 (Mev*)	13-175 (Mev**)	>175 (Mev)
22	1003-1500	1000	-061.6	654	-4.6					
		1100		654						
		1200		654						
		1300		571						
		1400		571						
		1500		571						

[1] Wolfe - NASA/ARC
[2] Simpson - University of Chicago

* Includes He 0.6-13 Mev/nucleons and electrons ∿0.5 Mev - see J. Retzler and J. A. Simpson, J. Geophys. Res., 74, 9, 2149-2160, 1969 for discussion of the electron response of Pioneer VII.

** Includes He >13 Mev/nucleons.
Q Used to indicate that a rate is at its quiescent level.

ESP = Earth-Sun Probe Angle.

† Peak velocity.

Note: Data sampled hourly unless otherwise noted.

PIONEER VIII
JUNE 1975

Date June 1975	DSN Coverage (UT)	Data Time (UT)	ESP (°)	SOLAR WIND[1]				IP E-FIELD[2]	IMF[3]		COSMIC RAY PROTONS[4] (particles/sec)	
				U_{H^+} (km/sec)*	N_{H^+} (H^+/cc)	T_{H^+} (x10^6°K)	TAU (days)	400 Hz (mv)	|B| (γ)	ϕ (°)	>13.9 Mev	>64 Mev
29	1601-1935	1600	153.9	585	---	---	11.6	0.41	3.2	352.	7.59	0.73
		1700		585				.28	2.5	020.	7.47	.73
		1800		585				.23	4.3	030.	7.62	1.14
		1900		542				.35	5.7	090.	7.64	1.28

[1] Wolfe - NASA/ARC.
[2] Scarf - TRW, Inc.
[3] Ness - NASA/Goddard & Mariani - Univ. of Roma
[4] Webber - Univ. of N.H.

ESP = Earth-Sun Probe Angle.

PIONEER IX
JUNE 1975

Date June 1975	DSN Coverage (UT)	Data Time (UT)	ESP (°)	SOLAR WIND[1]				IP E-FIELD[2]	IMF[3]		COSMIC RAY PROTONS[4] (particles/sec)	
				U_{H^+} (km/sec)*	N_{H^+} (H^+/cc)	T_{H^+} (x10^6°K)	TAU (days)	400 Hz (mv)	|B| (γ)	ϕ (°)	>13.9 Mev	>40 Mev
10	1510-2240	1500	169.8	325.	---	---	12.9	0.2	3.9	110.	7.27	0.67
		1600		350.				.22	6.2	054.	7.25	.54
		1700		350.				.22	6.	068.	7.26	.63
		1800		350.				.2	6.	067.	7.18	.62
		1900		350.				.23	6.5	046.	7.21	.73
		2000		350.				.18	4.5	076.	6.86	.63
		2100		350.				.21	5.3	095.	6.94	.76
		2200		350.				.2	5.4	098.	7.38	.69
		2300		350.				.18	5.2	059.	6.82	.66

[1] Wolfe - NASA/ARC
[2] Scarf - TRW, Inc.
[3] Sonett and Colburn - NASA/ARC
[4] Webber - Univ. of N.H.

ESP = Earth-Sun Probe Angle.

* Peak velocity

Note: Data sampled hourly unless otherwise noted.

INFERRED IP MAGNETIC FIELD

BARTELS ROTATION	DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1896	1972 MAR 10	A	A	A	A	A	A	A	A	A	A	T	A	T	A	T	A	T	A	T	A	T	T	A	A	A	T	T
1897	APR 6	A	A	T	T	T	T	A	A	AT	T	T	T	T	T	T	TA	T	T	T	T	T	T	T	A	A	T	T
1898	MAY 3	A	A	A	A	A	A	T	-	A	A	T	T	T	T	T	T	T	T	T	T	T	T	T	T	A	A	T
1899	MAY 30	A	A	A	A	A	*	A	A	ATA*	T	T	T	A	A	T	T	T	T	TA	T	A	A	A	-	A	-	TA
1900	JUN 26	A	A	A	A	A	A	TA	A	TA	A	A	A	A	T	AT	TA	T	T	T	T	T	TA	A	A	T	T	T
1901	JUL 23	TA	A*	TA	A*	T	A*	T	A	A	A	A	A	A	T	A*	TA	T	T	A	A	A	A	TA	A	T	-	AT
1902	AUG 19	A	-	A	-	A	A	A	A	A	A	A	A	A	A	TA	T	A	A	A	A	A	A	A	A	T	T	T
1903	SEP 15	A	A	TA	T*	A	A	A	A	A	A	TA	A	A	A	A	T	T	A	A	TA	A	A	A	-	A	-	A
1904	OCT 12	T	T	A	-	TA	-	A	A*	A	T	A	T	TA	T	A	A	A	A	A	A	A	A	A	T	AT	T	T
1905	NOV 8	A	A	T	A	ATA	AT	AT	TA	AT	T	ATA	T	TA	T*	A	A	A	A	A	A*	TA	AT	A	A	A	A	TA
1906	DEC 5	T	T	T	T	TA	AT	T	-	T	-	T	T	T	T	A	A	TA	-	TA	T	TA	T	A	A	AT	-	A
1907	1973 JAN 1	T	T	T	T	T	T	T	T	TA	T	T	A	T	AT	-	A	AT	A	T	A	-	AT	-	A	TA	A	A
1908	JAN 28	T	T	A	A	T	T	TA	T	AT	T	T	T	T	A	T	A	A	A	TA	A	A	A	A	AT	T	TA	A
1909	FEB 24	AT	T	AT	T	AT	TA	AT	T	T	T	T	-	AT	TA	AT	A	TA	T	A	T	TA	A	A	A	A	A	A
1910	MAR 23	T	T	T	T	T	T	T	A	T	T	T	T	T	T	TA	AT	A	T	TA	A	A	A	A	A	-	A	A
1911	APR 19	T	T	T	AT	T	T-	A	T	T	T	AT	T	A	A	ATT	T	T	T	TA	A	A	A	A	AT	A*	A	A
1912	MAY 16	T	T	T	T	T	T	T	T	AT	T	-	T	-	TA	T	T	A	A	AT	AT	T	T	AT	A	A	A	-
1913	JUN 12	TA	T*	-	T	*	-	T	T	TAT*	A	A	T	T	-	T	T	T*	T	T	T	T	T	AT	AT	A	A	A
1914	JUL 9	T	T	T	T	A	A	T	T	-	T	ATA	T	T*	A	T*	-	A	A	AT	*	-	A	A	T	T	A	TA
1915	AUG 5	T	T	A	A	A	A	T	AT	A	A	A	T	T	T*	T	T	AT	*	T	AT	T	T	A	A	T	A	T
1916	SEP 1	T	TA	T*	T	T	T	A	AT	A	A	A	TA	A	A	A*	A	A	A	*	T	T	T	T	T	T	T	T
1917	SEP 28	A	A*	TA	A	T	AT	T	T	A	A	A	A	A	A	T	A	ATA	A*	AT	T*	AT	AT	T	T	T	T	T
1918	OCT 25	T	T	T	T	A	TA	A	A	A	T	A	T*	T	A	T	A	A	A	A	A	A	A	T	A	TA	T	T
1919	NOV 21	A	*	T	T	T	T	-	A	A	A	A	AT	T	A	T	A	T*	A	TA	A	A	A	A	A	A	A	A
1920	DEC 18	T	T	AT	A	A	T	A	T	A	TA	A	T	A	*	A	A	A	*	AT	T	T	T	T	T	T	T	T
1921	1974 JAN 14	T	A	A	T	-	T	T	A	A	T	A	A	A	A	A	A	-	A	A	-	AT	-	T	T	T	TA	T
1922	FEB 10	A	-	A	-	A	*	A	A	A	A	A	A	A	A	TA	T	A	A	A	A	A	T	*	T	T	T	T
1923	MAR 9	A	A	A	A	A	A	A	A	A	A	A	A	T	T	TA	TA	A	AT	A	A	A	T	A	T	TA	T	T
1924	APR 5	A	A	A	A	A	-	TA	A	A	A	A	A	A	*	A	A	A	A	A	A	A	A	T	T	TA	TA	T
1925	MAY 2	-	-	A	A	A	A*	AT	T	A	AT	AT	T	A	T*	TA	A	A	TA	T*	A	A*	AT	AT	T	T	T	T
1926	MAY 29	T	T	A	A	A	*	-	A	A	A	A	*	A	A	*	-	TA	*	A	A	A	A	T	T	T	T	T
1927	JUN 25	TA	TA	A	A	-	A	-	A	A	T	A	A	A	A	A	A	A	A	-	TA	TA	-	T	T	T	T	T
1928	JUL 22	T	T	A	A	A	A	AT	A	A	A	A	A	A	A	A	A	A	A	A	A	-	T	-	T	-	T	-
1929	AUG 18	AT	-	A	-	A	-	A	-	A	-	A	-	A	-	AT	-	TA	T	T	T	T	T	T	T	T	T	T
1930	SEP 14	AT	T	T	TA	ATA*	A	A	A	A	A	A	A	A	TA	A	TA	A	A	A	AT	T	T	TA	A	T	AT	T
1931	OCT 11	T	T	TA	T	A	A	A	A	A	A	A	A	A	A	A	A	TA	A	A	TA	A	A	T	T	AT	-	T
1932	NOV 7	TA	-	T	-	A	-	A	-	A	A	A	A	A	A	A	A	A	A	-	A	-	AT	-	TA	A	T	T
1933	DEC 4	T	T	TA	T	T	A	TA	A	A	T	A	T	A	*	AT	T*	A	T	A	*	A	T	A	A	T	T	T
1934	DEC 31	T	A	T	T	T	A	TA	A	T	A	T	A	-	A	-	TA	T	A	A	AT	-	A	A	*	A	*	T
1935	1975 JAN 27	T	T	T	T	A	T	AT	T	A	A*	A	T	-	TA	A	A	T	A	T	A	T	A	T	A	T	T	*
1936	FEB 23	TA	A	A	A	A	A*	TA	A	A	AT	A	A	A	A	A	A	A	A	A	A	A	T	AT	T	T	T	T
1937	MAR 22	A	A	A	A	TA	A	T	T	A	A*	A	A	A	A	A	A	ATA	*	T	A	A	A	T	*	TA	T	T
1938	APR 18	A	A	A	A	A	A	A	A	A	*	A	A*	A	A	-	A	A	A	A	A	A	T	T	A	A	T	T
1939	MAY 15	T	T	A	A	TA	TA	A	A	A	A	T	T	TA	TA	-	*	A	A	A	A	A	A	-	-	-	-	-
1940	JUN 11	A	A	A	A	A	A	A	A	A	A	*	-	-	-	-	-	-	-	A	A	A	A	TA	A	A	T	A

T = towards the sun
A = away from the sun
* = effect doubtful or not discernable
- = missing data

The table shows daily inferences of the polarity of the interplanetary magnetic field. The first half of the day is based principally on magnetograms produced by the magnetometer at the Vostok Anarctic Station of the USSR. The magnetometer of the U.S. Air Weather Service operated by the Air Force Cambridge Research Laboratories at the Thule Geopole Station is used for the second half of the day.

Note: Computer problems are responsible for the considerable amount of missing data in August 1974.

MAY 1975 DATA

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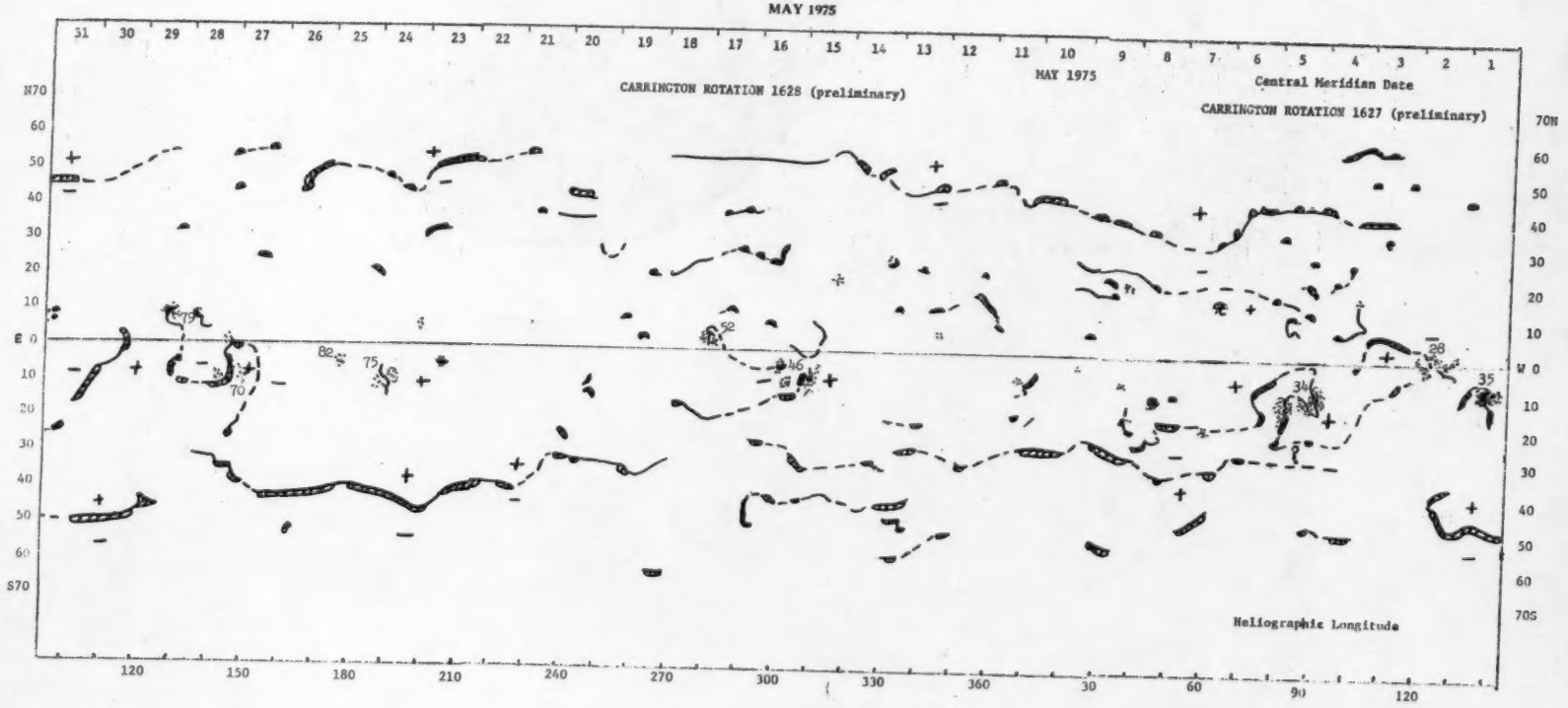
Hα SYNOPTIC CHART

MAY 1975

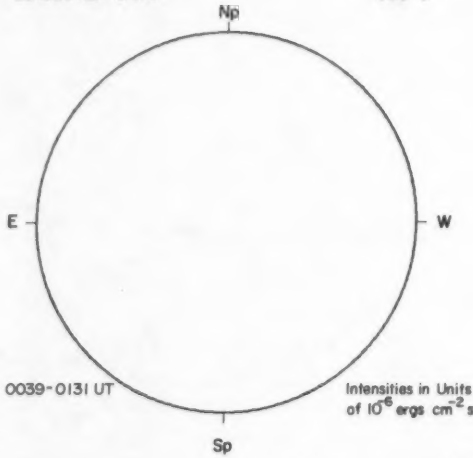


23 May 75

MAY 1, 1975 (P = -24.29, B_o = -4.19, L_o = 144.52)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

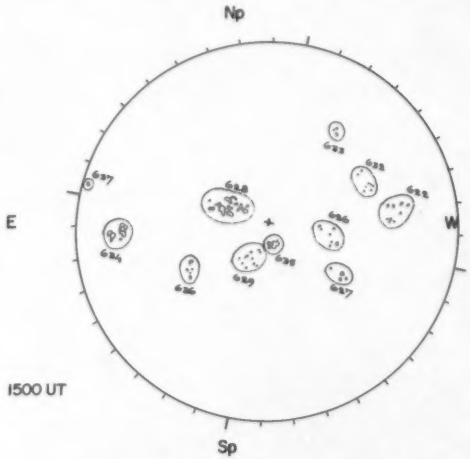


0039-0131 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

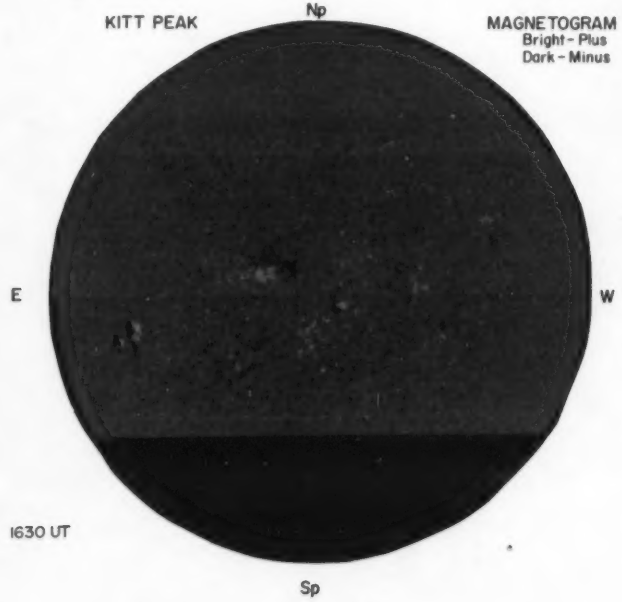
CALCIUM REPORT



1500 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

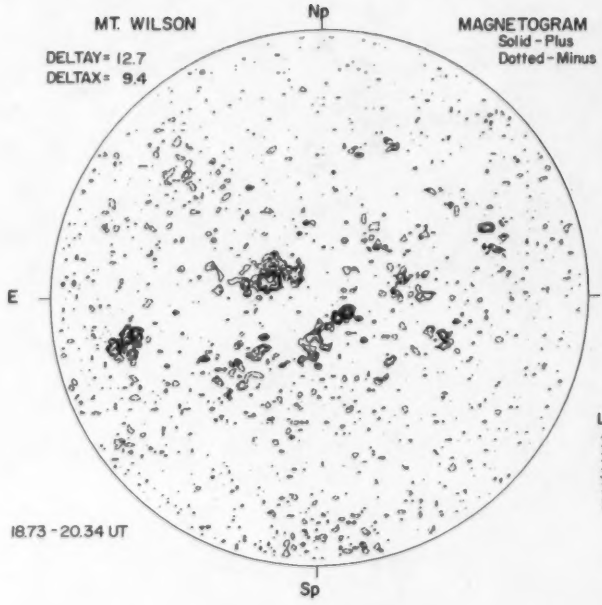


1630 UT

MT. WILSON

DELTAY= 12.7
DELTAX= 9.4

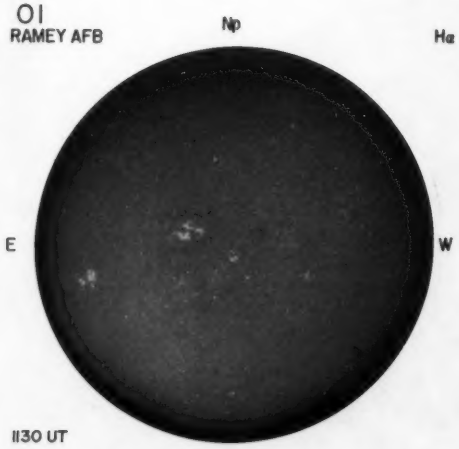
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
±5
±10
±20
±40
±80

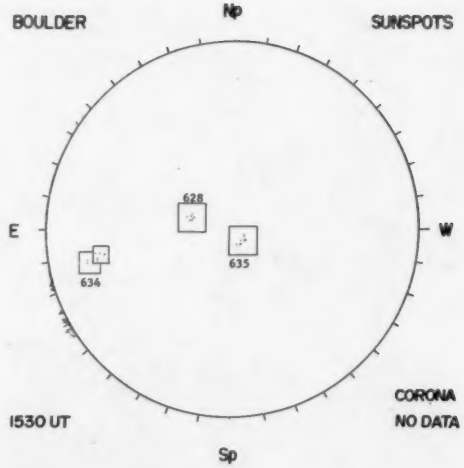
18.73 - 20.34 UT

01
RAMEY AFB



1130 UT

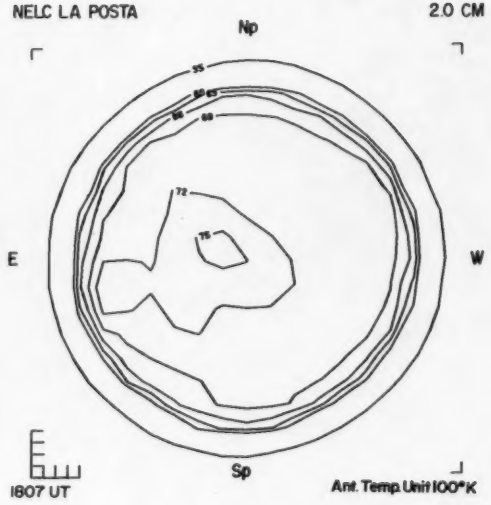
BOULDER



1530 UT

CORONA
NO DATA

NELC LA POSTA



1807 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

1907 UT

Ant. Temp. Unit 100°K

25
May 75

MAY 2, 1975 (P=-24.11, B_o=-4.09, L_o=131.30)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

Np

E

NO DATA

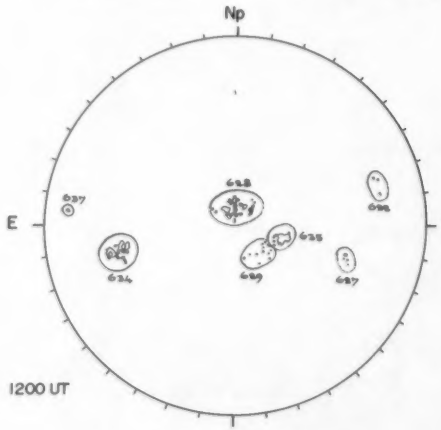
W

Sp

Intensities in Units
of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

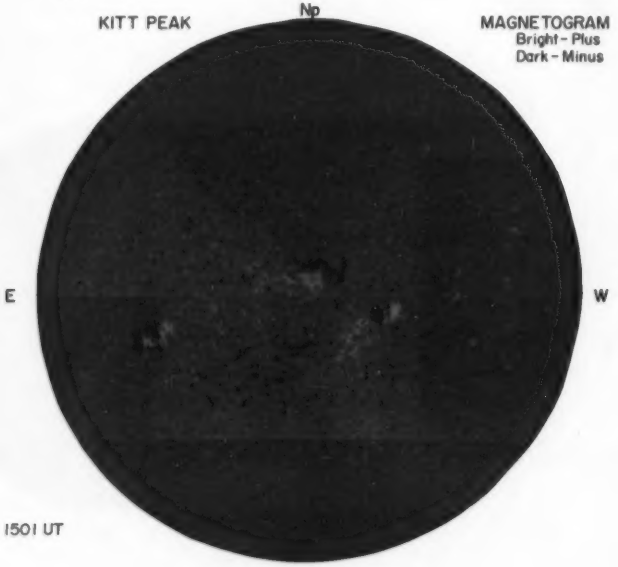
CALCIUM REPORT



1200 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

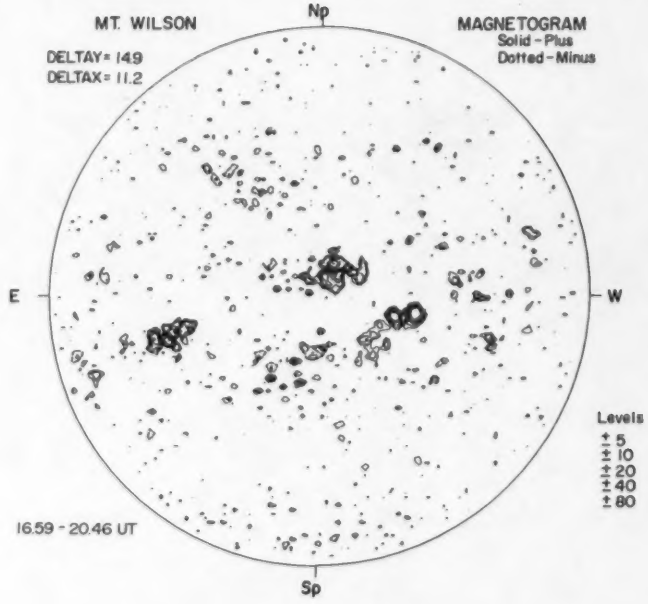


1501 UT

MT. WILSON

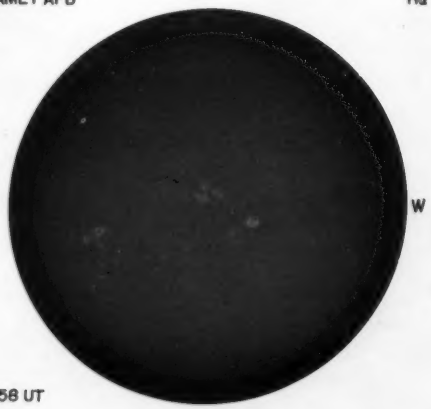
DELTAY = 14.9
DELTAX = 11.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus



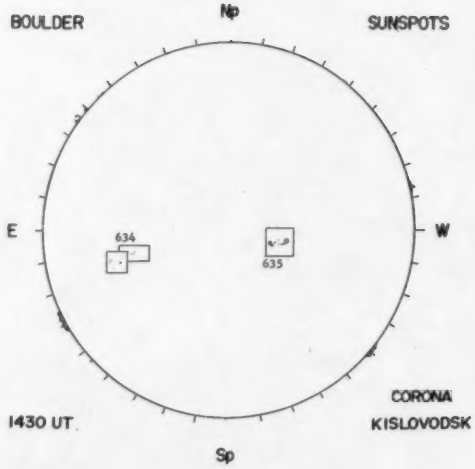
16.59 - 20.46 UT

02
RAMEY AFB



1158 UT

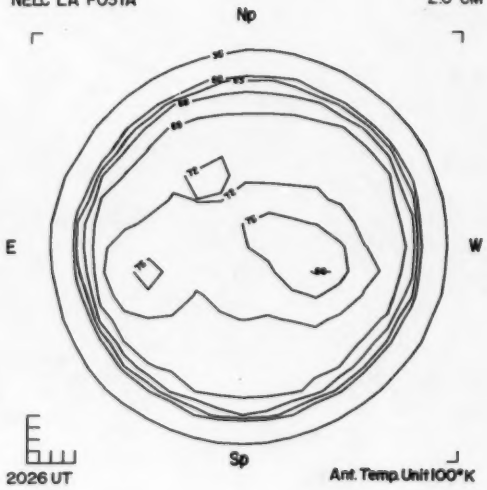
BOULDER



1430 UT

CORONA
KISLOVODSK

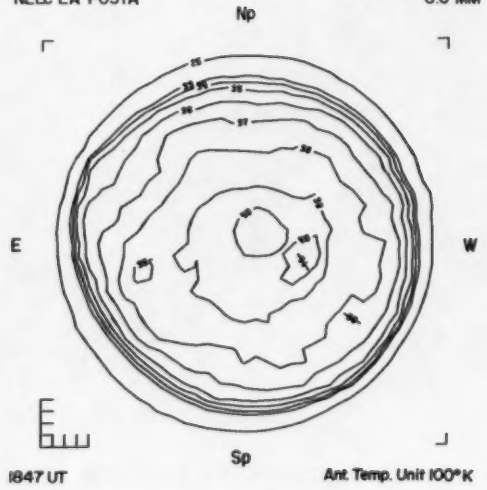
NELC LA POSTA



2026 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



1847 UT

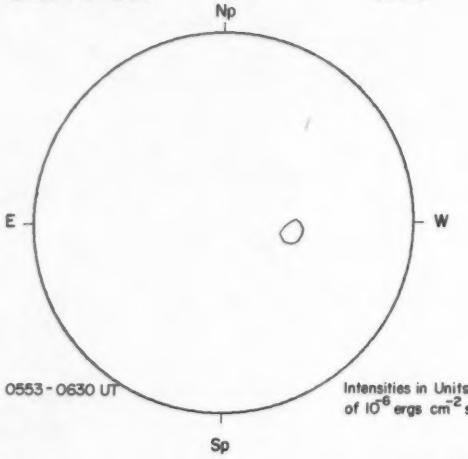
Ant. Temp. Unit 100°K

27
May 75

MAY 3, 1975 (P=-23.93, B_o=-3.99, L_o=118.08)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

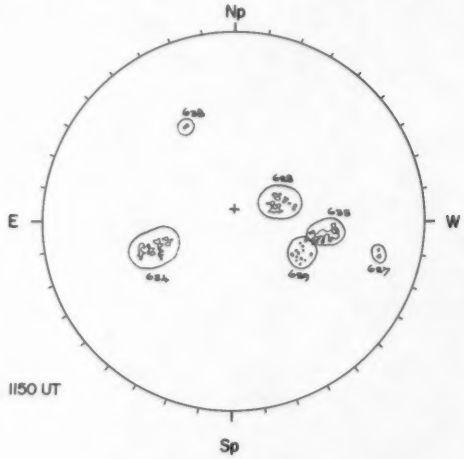


0553 - 0630 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

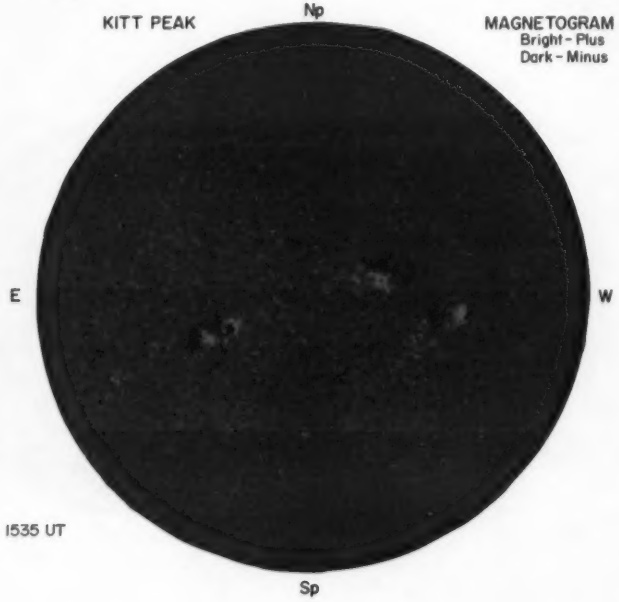


FAIR	M
28 - 0800 - 2.5	
34 - 0800 - 2.5	
35 - 0900 - 2.5	

1150 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

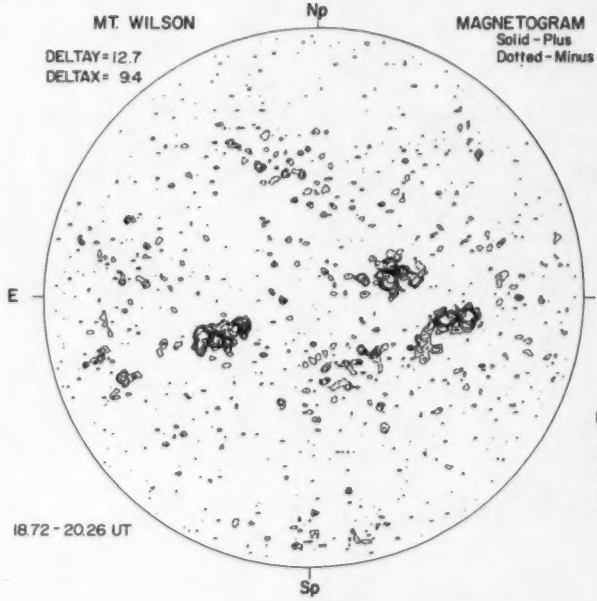


1535 UT

MT. WILSON

DELTAY = 12.7
DELTAX = 9.4

MAGNETOGRAM
Solid - Plus
Dotted - Minus

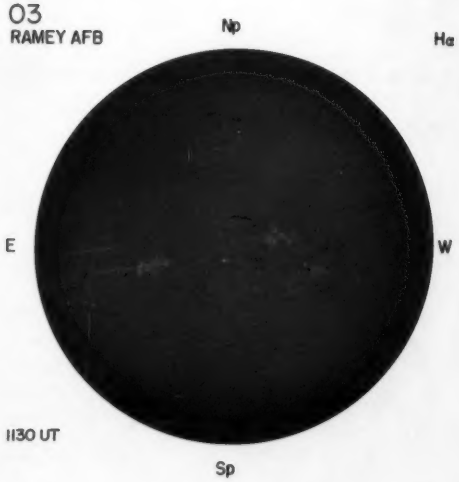


Levels
± 5
± 10
± 20
± 40
± 80

18.72 - 20.26 UT

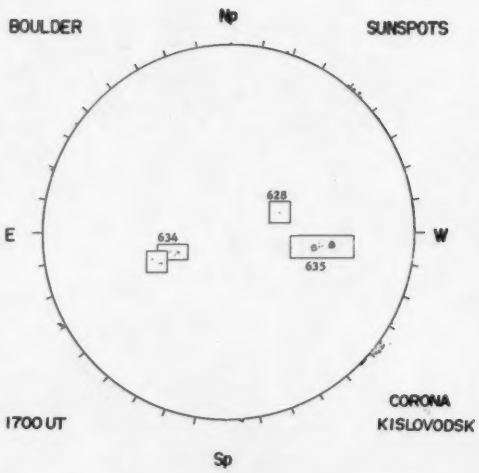
03

RAMEY AFB



1130 UT

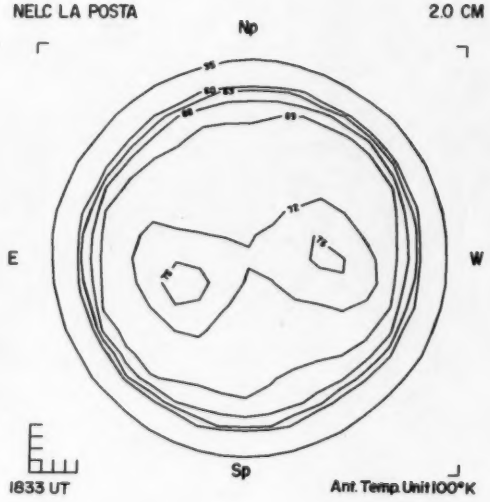
BOULDER



1700 UT

CORONA
KISLOVODSK

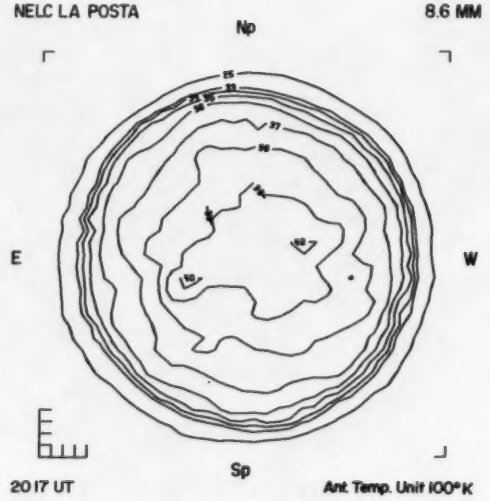
NELC LA POSTA



1833 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



2017 UT

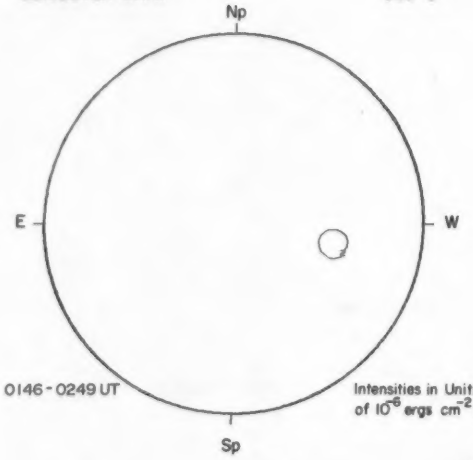
Ant. Temp. Unit 100°K

29
May 75

MAY 4, 1975 (P=-23.74, B_o=-3.89, L_o=104.87)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

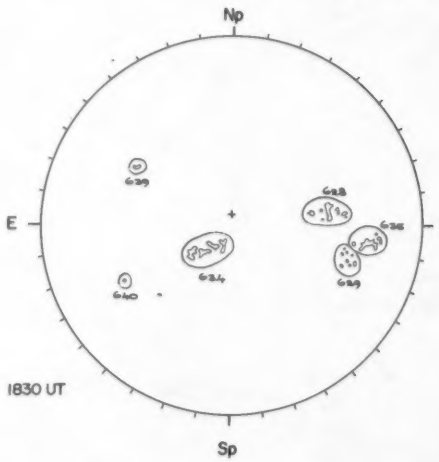


0146 - 0249 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

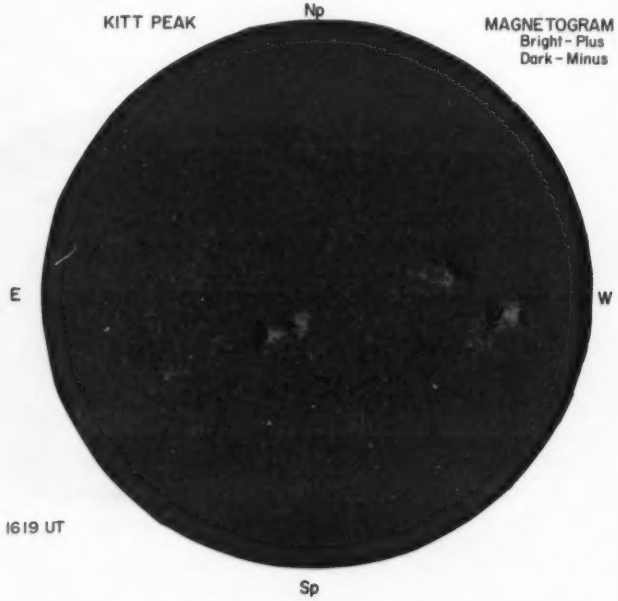


FAIR	D
28 - 0700 - 2.5	
34 - 1000 - 2.5	
35 - 0900 - 2.5	

1830 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

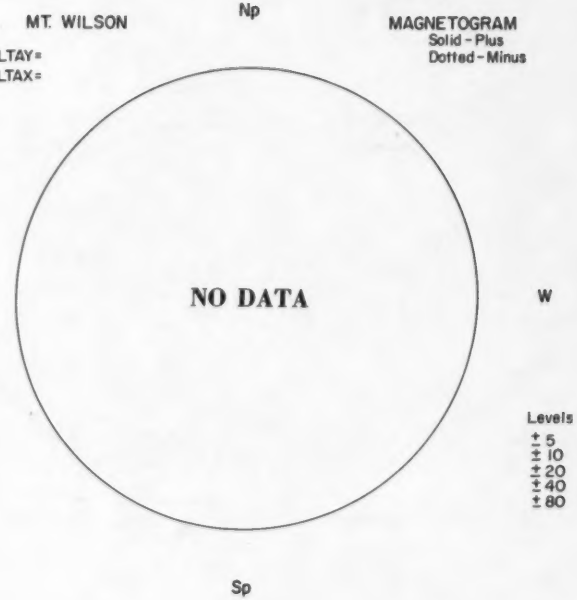


1619 UT

MT. WILSON

DELTAY=
DELTAX=

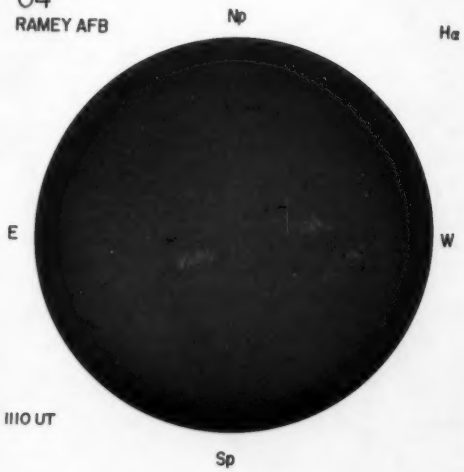
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
± 5
± 10
± 20
± 40
± 80

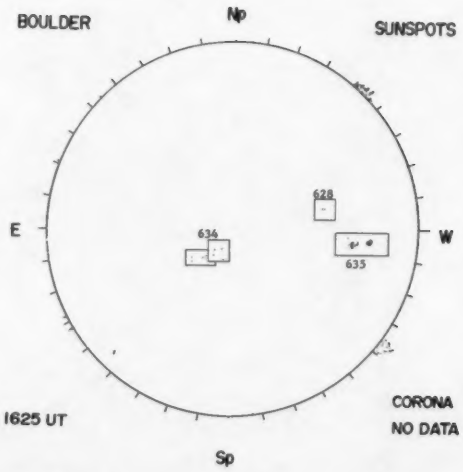
04

RAMEY AFB



1110 UT

BOULDER

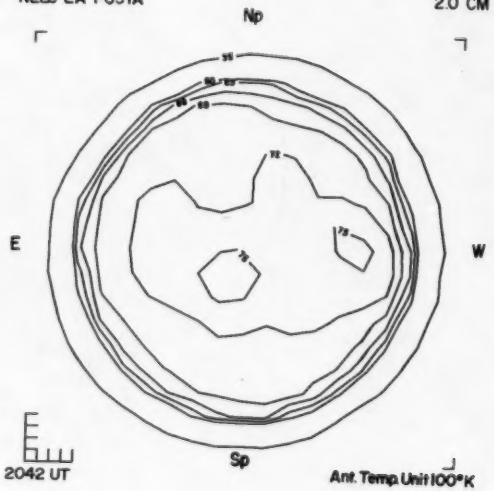


1625 UT

CORONA

NO DATA

NELC LA POSTA



2042 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

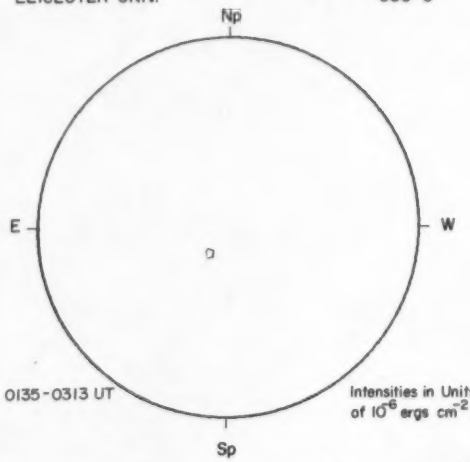
Ant. Temp. Unit 100°K

31
May 75

MAY 5, 1975 (P=-23.54, B_o=-3.78, L_o=91.65)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

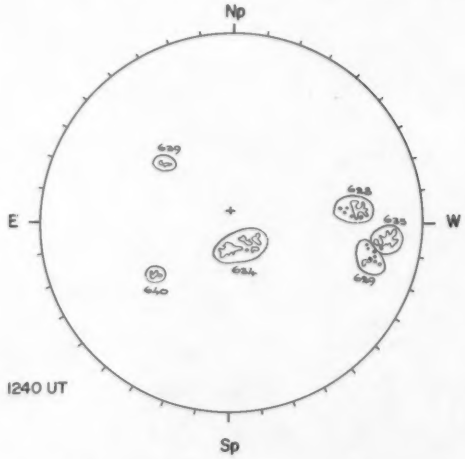


0135-0313 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

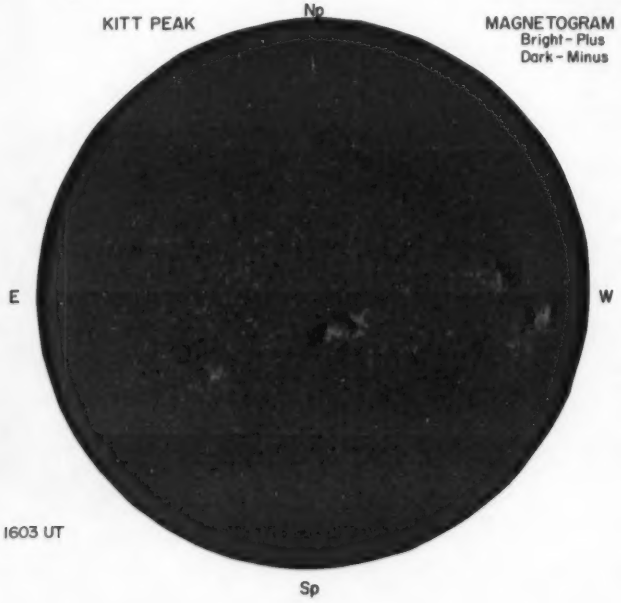


GOOD	D
28 - 0800 - 2.5	
34 - 1200 - 3.0	
35 - 1100 - 3.0	

1240 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

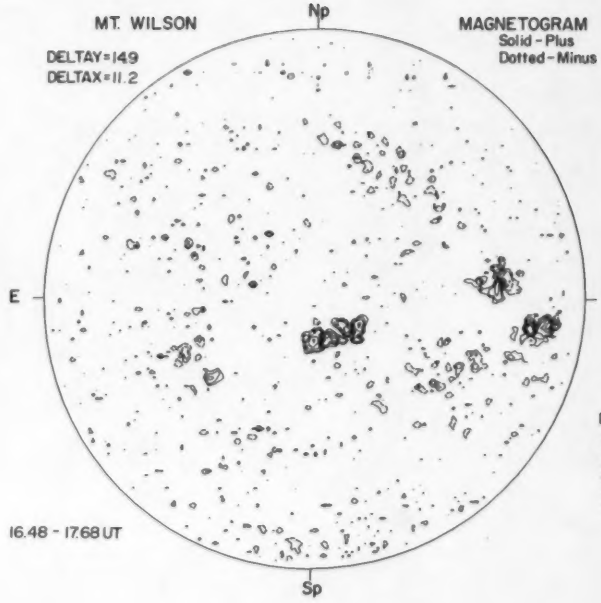


1603 UT

MT. WILSON

DELTAY=14.9
DELTAX=11.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus

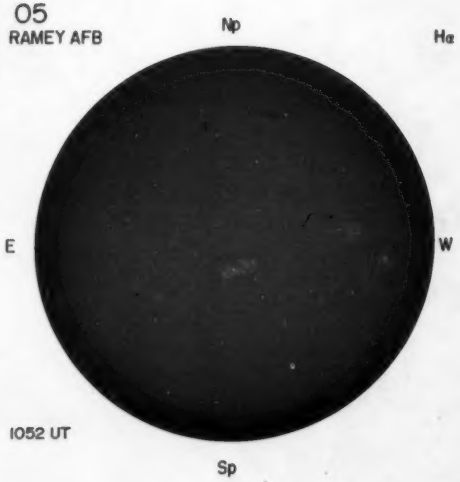


Levels
±5
±10
±20
±40
±80

16.48 - 17.68 UT

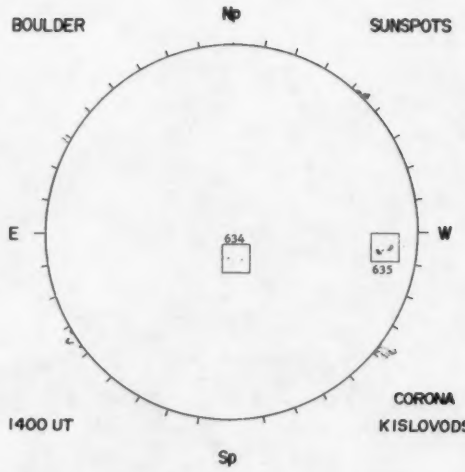
05

RAMEY AFB



1052 UT

BOULDER

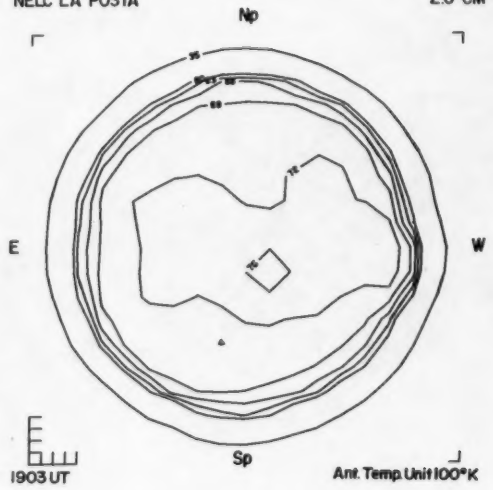


CORONA

KISLOVODSK

1400 UT

NELC LA POSTA



1903 UT

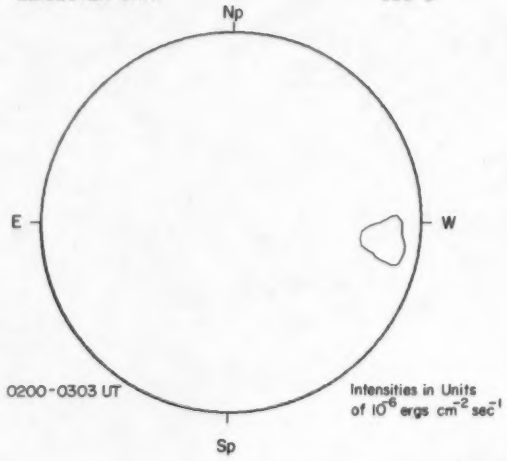
NELC LA POSTA

1956 UT

MAY 6, 1975 (P=-23.34, B_o=-3.68, L_o=78.43)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

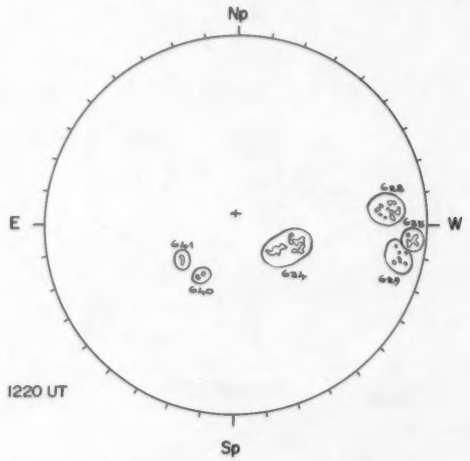


0200-0303 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

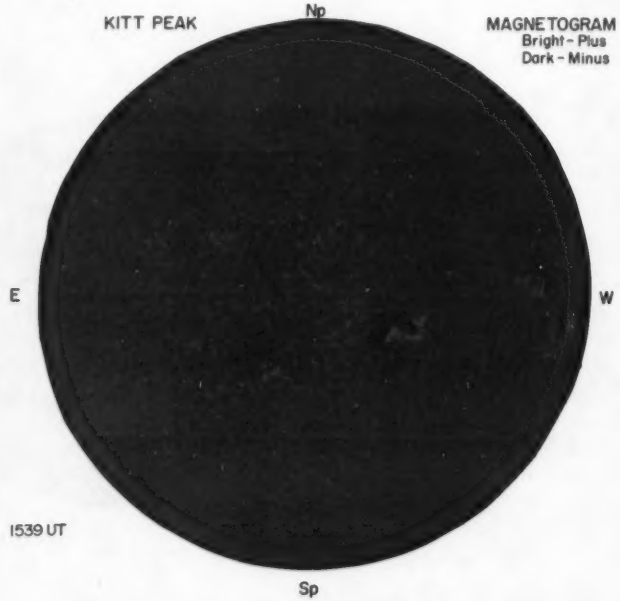


POOR | D
34 - 1200 - 3.0
35 - 0900 - 2.5

1220 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

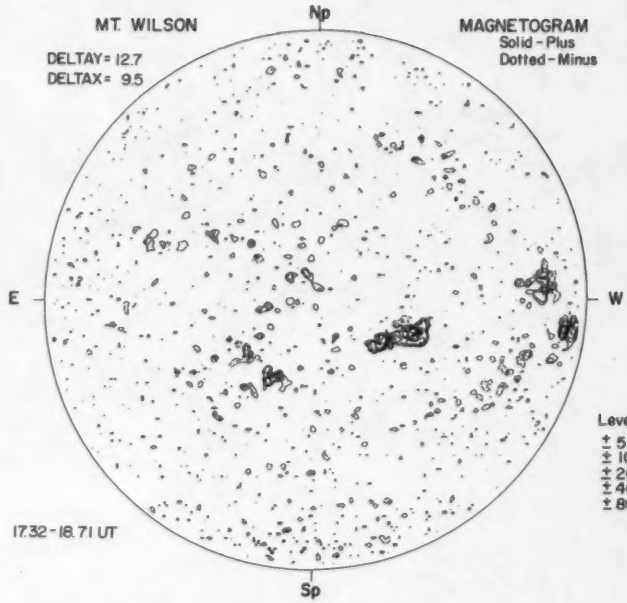


1539 UT

MT. WILSON

DELTAY= 12.7
DELTAX= 9.5

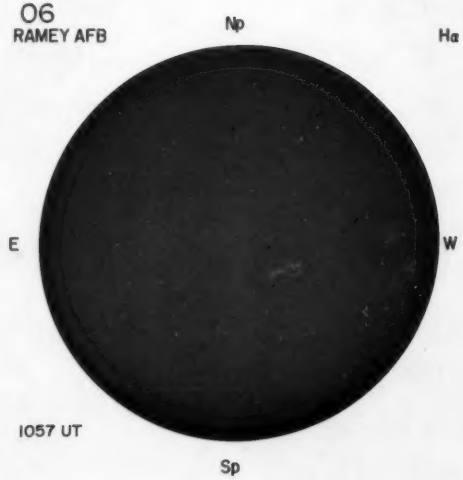
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
± 5
± 10
± 20
± 40
± 80

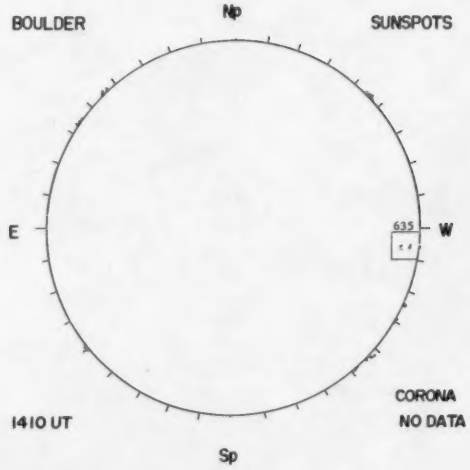
17.32 - 18.71 UT

06
RAMEY AFB



1057 UT

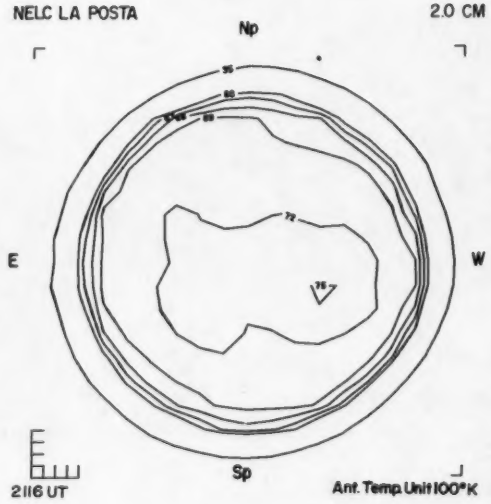
BOULDER



1410 UT

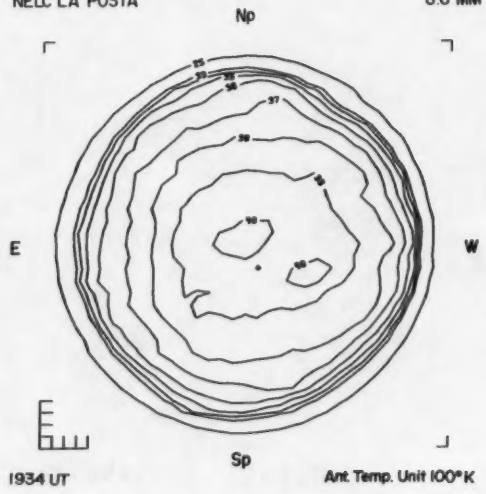
CORONA
NO DATA

NELC LA POSTA



2116 UT

NELC LA POSTA

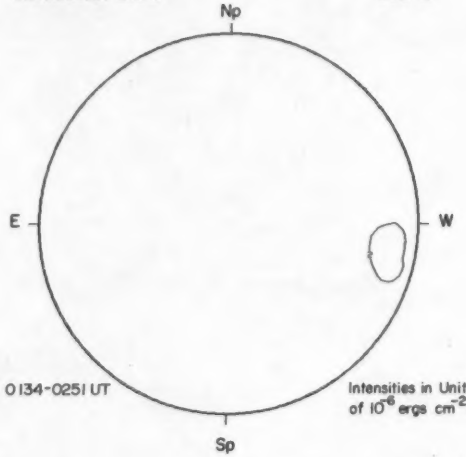


1934 UT

MAY 7, 1975 (P=-23.12, B_o=-3.57, L_o=65.21)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

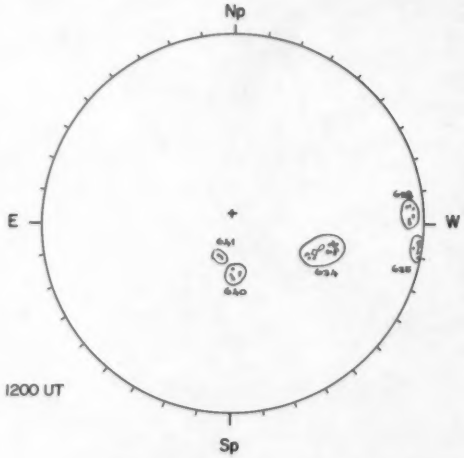


0134-0251 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

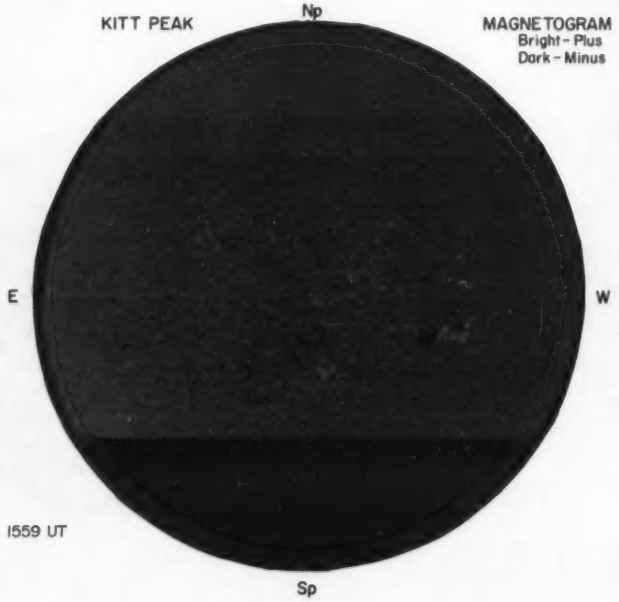


GOOD | M
34 - 0800 - 2.5

1200 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

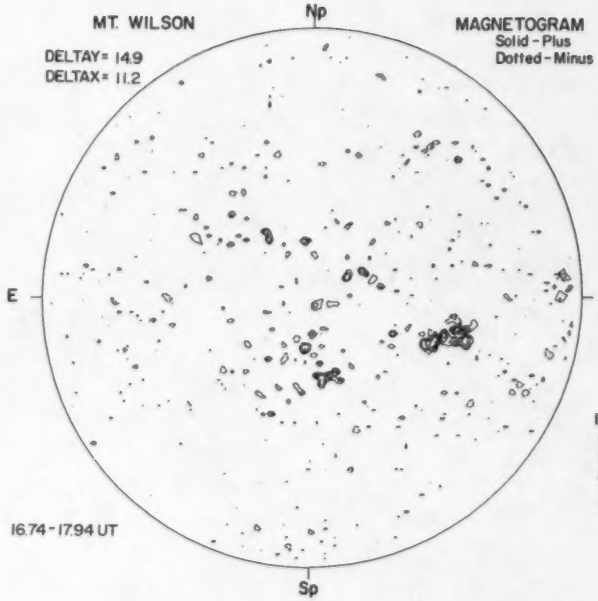


1559 UT

MT. WILSON

DELTAY= 14.9
DELTAX= 11.2

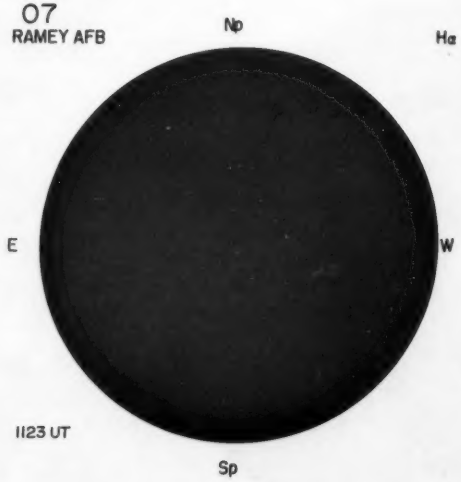
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
± 5
± 10
± 20
± 40
± 80

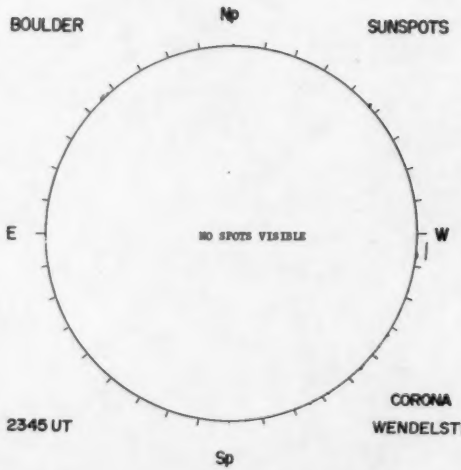
16.74 - 17.94 UT

07
RAMEY AFB



1123 UT

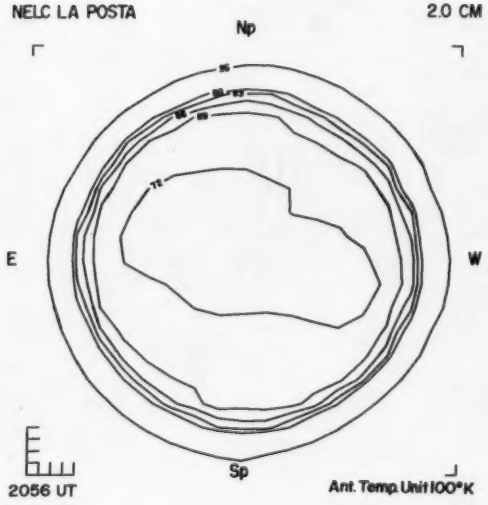
BOULDER



2345 UT

CORONA
WENDELSTEIN

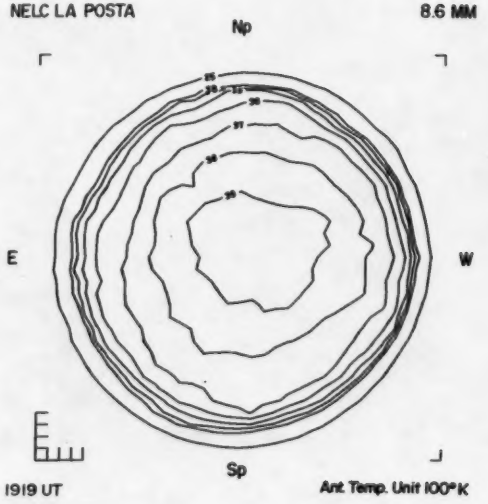
NELC LA POSTA 2.0 CM



2056 UT

Ant. Temp. Unit 100°K

NELC LA POSTA 8.6 MM



1919 UT

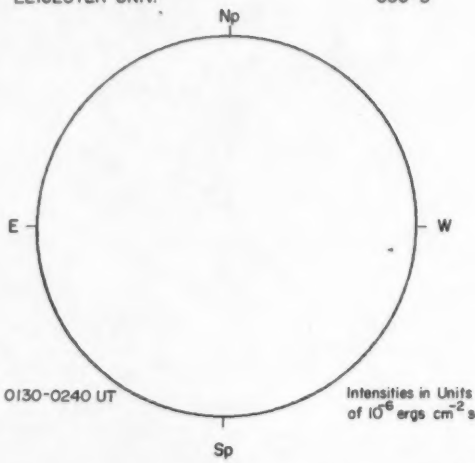
Ant. Temp. Unit 100°K

37
May 75

MAY 8, 1975 (P=-22.90, B_o=-3.47, L_o=51.99)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

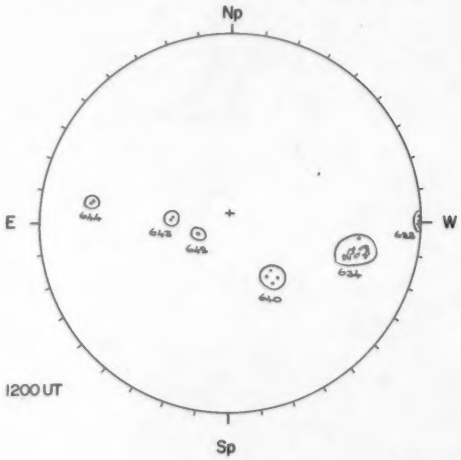


0130-0240 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

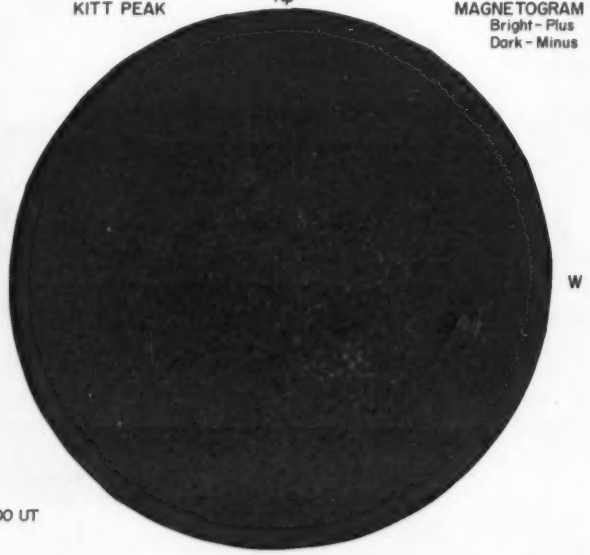


GOOD | D

1200 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus



1500 UT

MT. WILSON

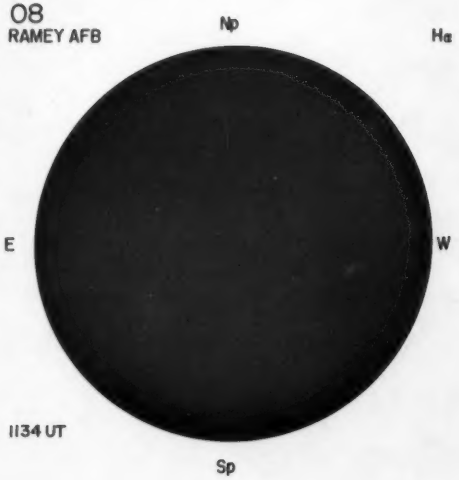
DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus

NO DATA

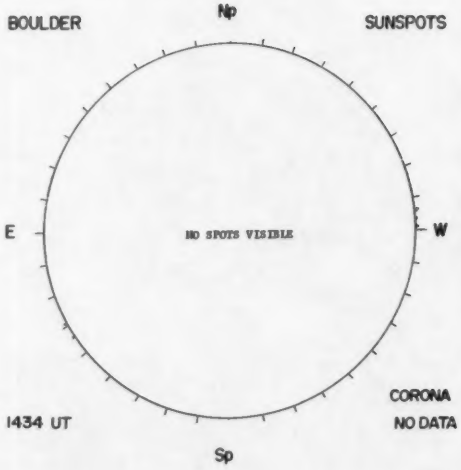
Levels
± 5
± 10
± 20
± 40
± 80

08
RAMEY AFB



1134 UT

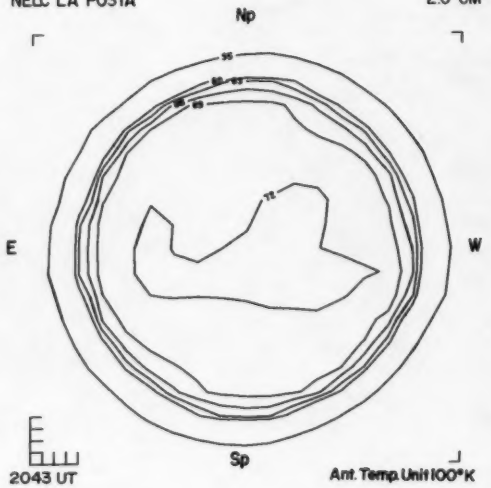
BOULDER



1434 UT

CORONA
NO DATA

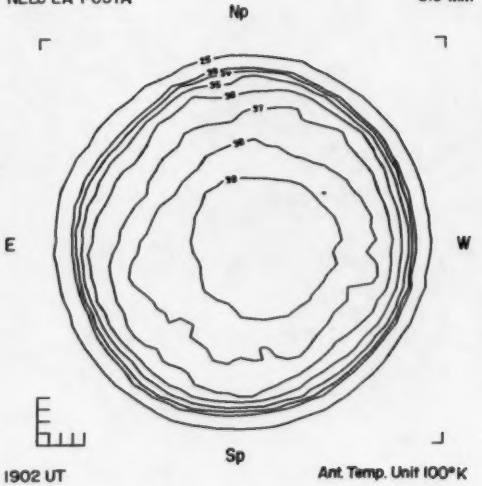
NELC LA POSTA 2.0 CM



2043 UT

Ant. Temp. Unit 100°K

NELC LA POSTA 8.6 MM



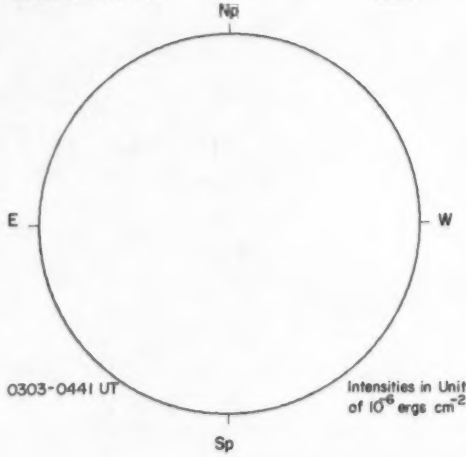
1902 UT

Ant. Temp. Unit 100°K

MAY 9, 1975 (P=-22.68, B_o=-3.36, L_o=38.77)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

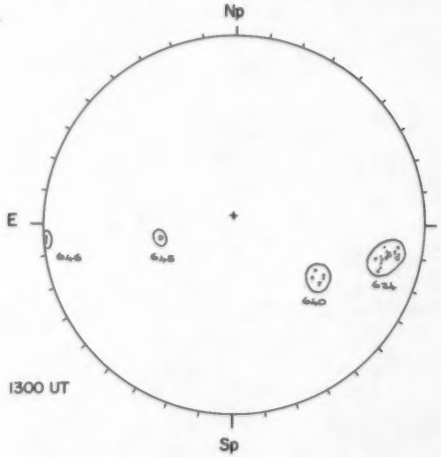


0303-0441 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

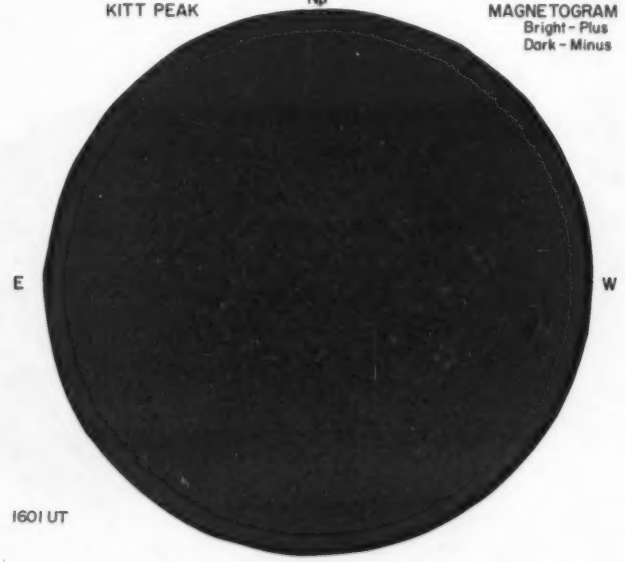


GOOD | M

1300 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

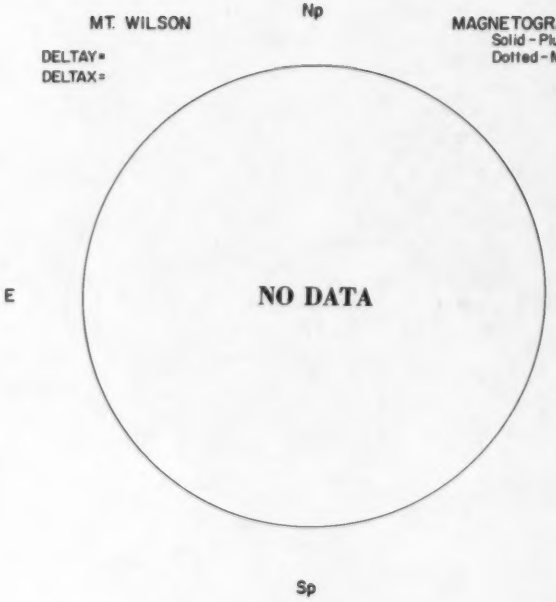


1601 UT

MT. WILSON

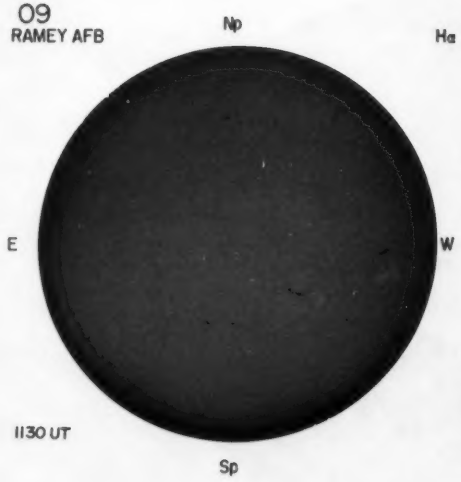
DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus



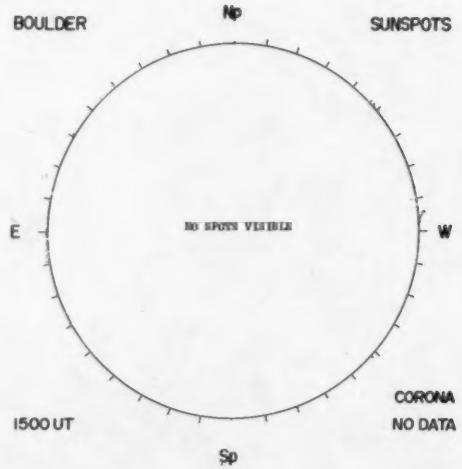
Levels
±5
±10
±20
±40
±80

09
RAMEY AFB



1130 UT

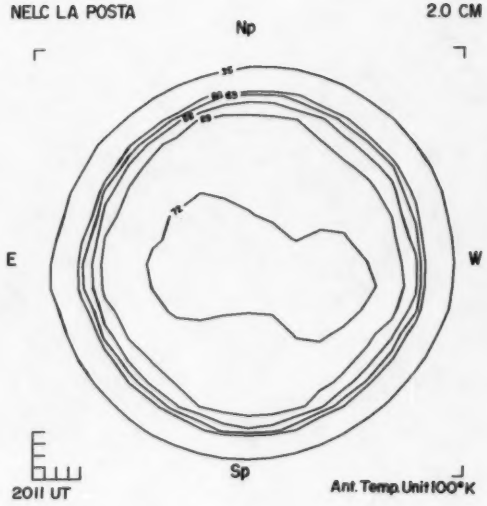
BOULDER



1500 UT

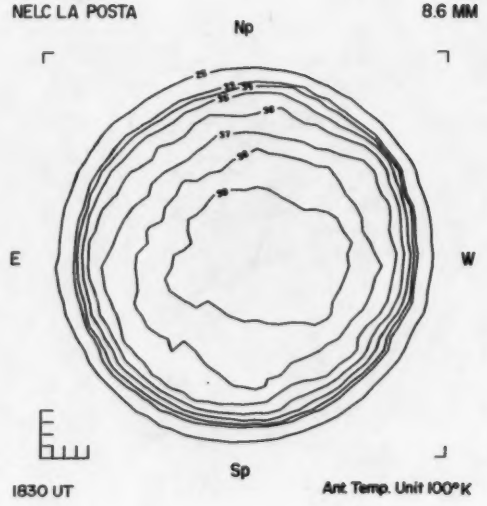
CORONA
NO DATA

NELC LA POSTA



2011 UT

NELC LA POSTA

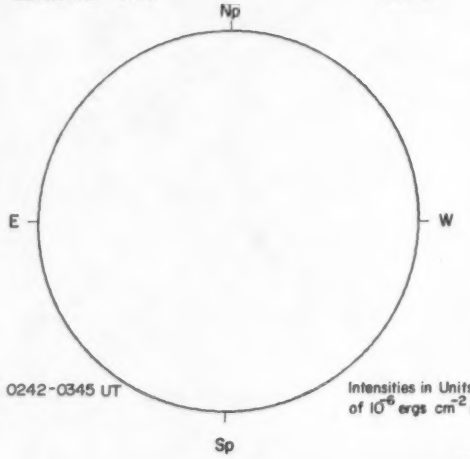


1830 UT

MAY 10, 1975 (P=-22.44, B_o=-3.25, L_o=25.55)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

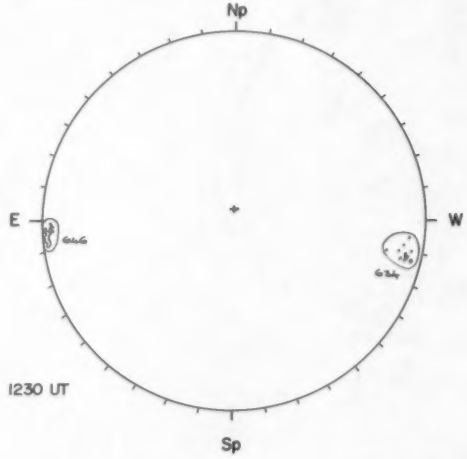


0242-0345 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

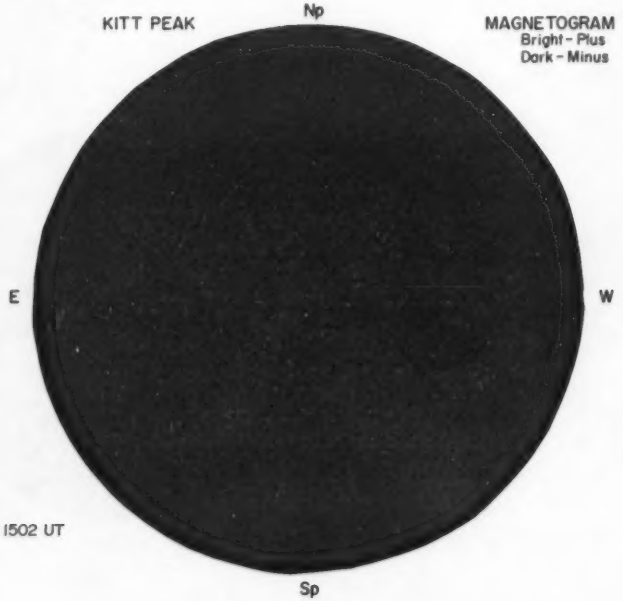


GOOD | M
46 - 1200 - 2.5

1230 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

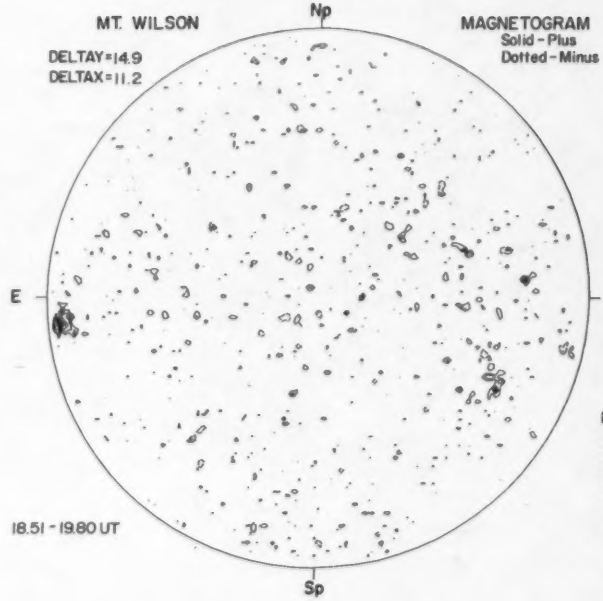


1502 UT

MT. WILSON

DELTAY=14.9
DELTAX=11.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus

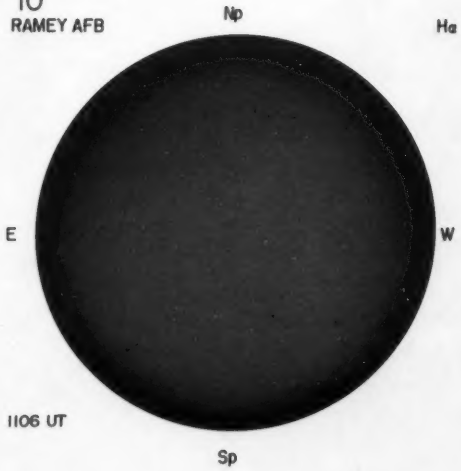


Levels
± 5
± 10
± 20
± 40
± 80

18.51 - 19.80 UT

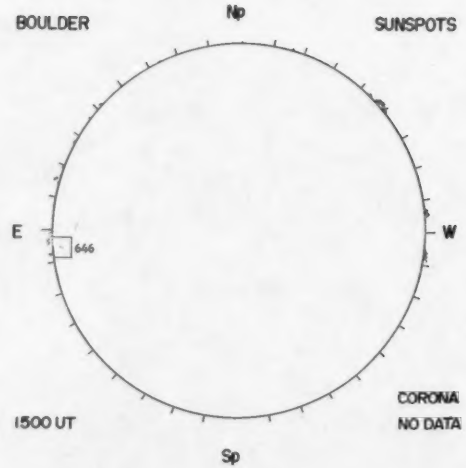
10

RAMEY AFB



1106 UT

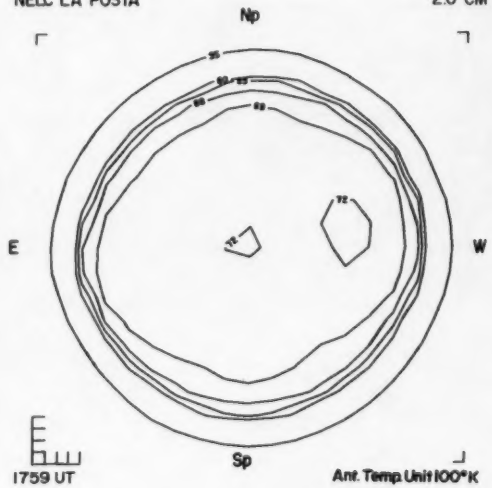
BOULDER



1500 UT

CORONA
NO DATA

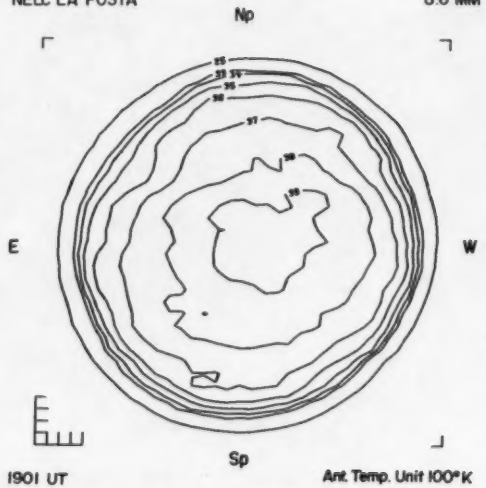
NELC LA POSTA



1759 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



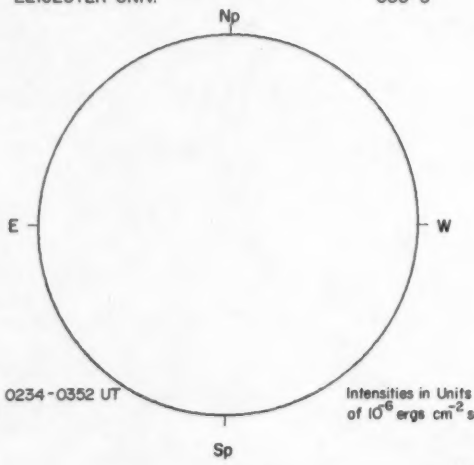
1901 UT

Ant. Temp. Unit 100°K

MAY 11, 1975 (P=-22.20, B_o=-3.14, L_o=12.32)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

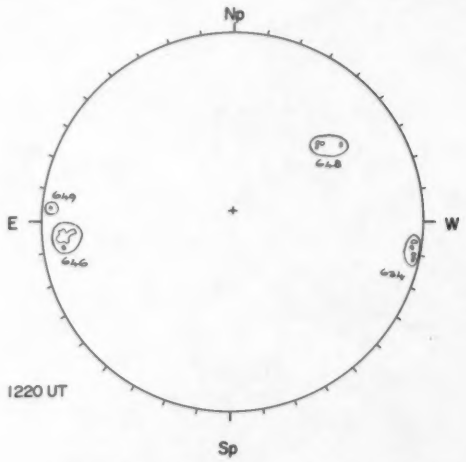


0234-0352 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

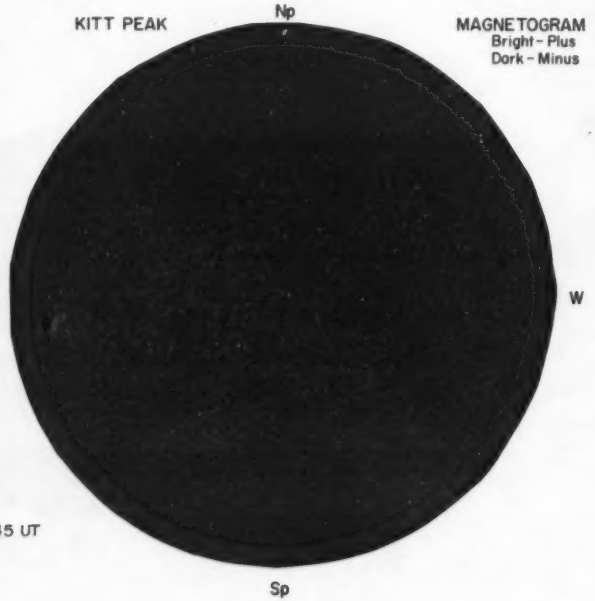


GOOD | D
46 - 1300 - 2.5

1220 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

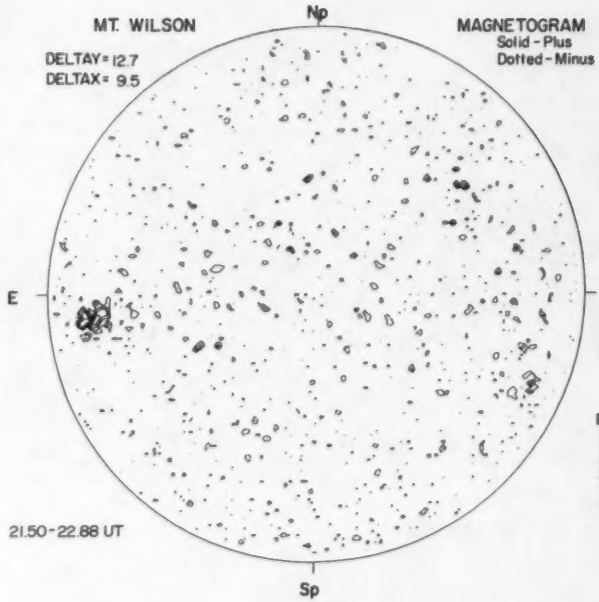


1445 UT

MT. WILSON

DELTAY=12.7
DELTAX= 9.5

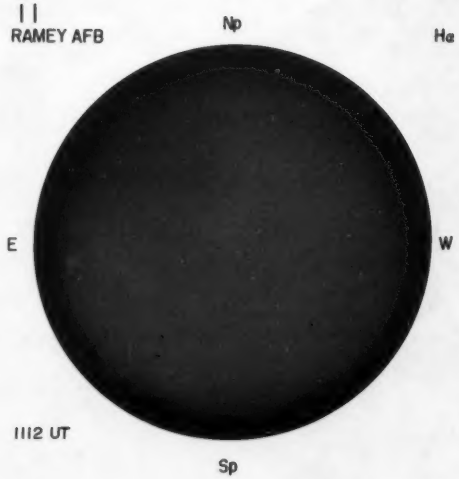
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
±5
±10
±20
±40
±80

21.50-22.88 UT

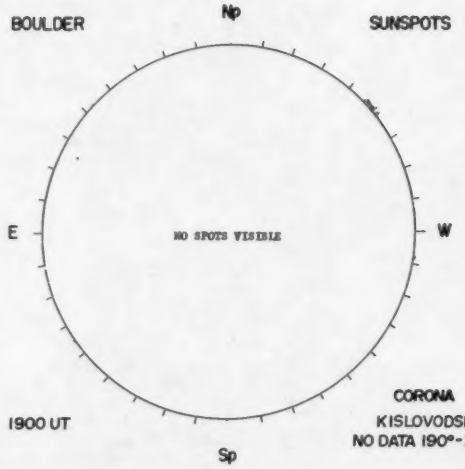
RAMEY AFB



1112 UT

BOULDER

SUNSPOTS



1900 UT

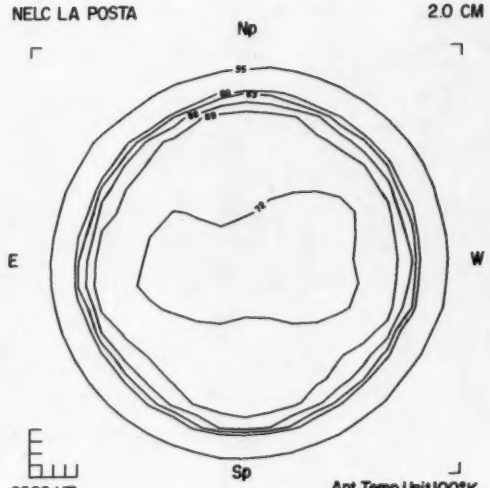
CORONA

KISLOVODSK

NO DATA 190°-320°

NELC LA POSTA

2.0 CM

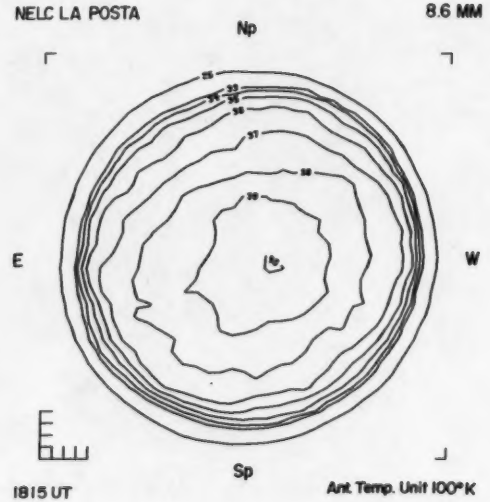


2002 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



1815 UT

Ant. Temp. Unit 100°K

MAY 12, 1975 (P=-21.96, B_o=-3.03, L_o=359.10)

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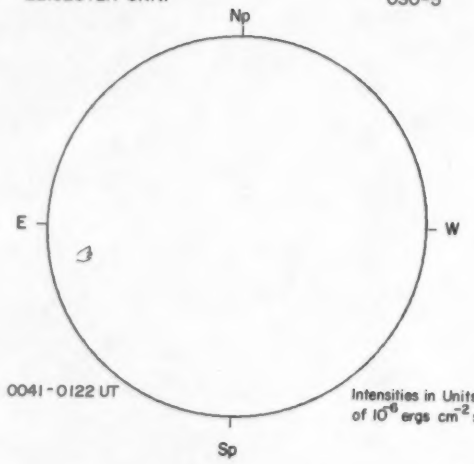
X-RAY
OSO-5



0041-0122 UT

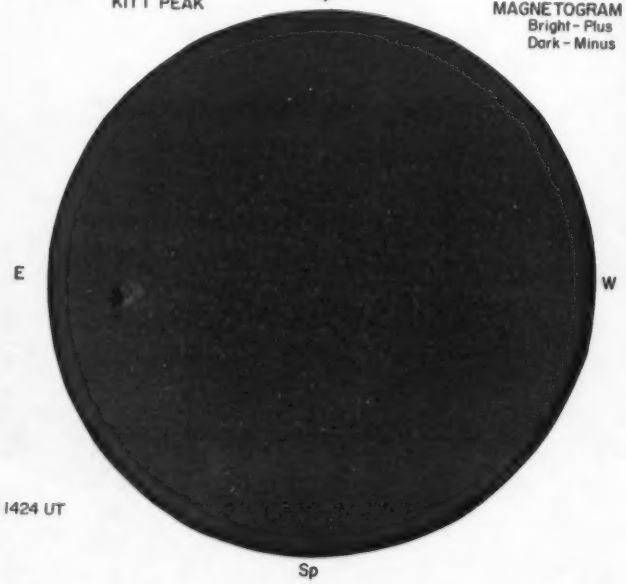
Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

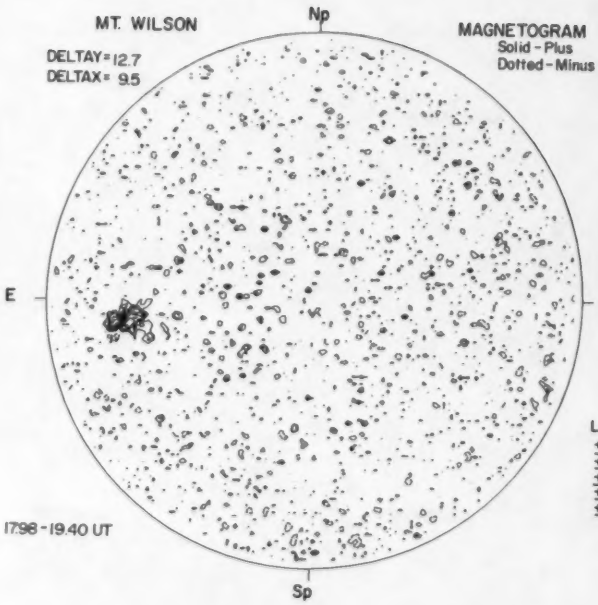


1424 UT

MT. WILSON

DELTAY = 12.7
DELTAX = 9.5

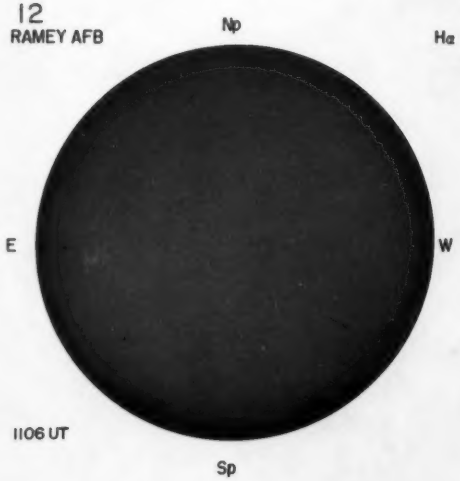
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
±5
±10
±20
±40
±80

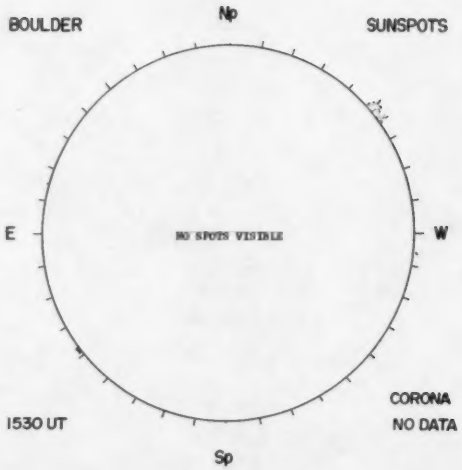
1798-1940 UT

12
RAMEY AFB



1106 UT

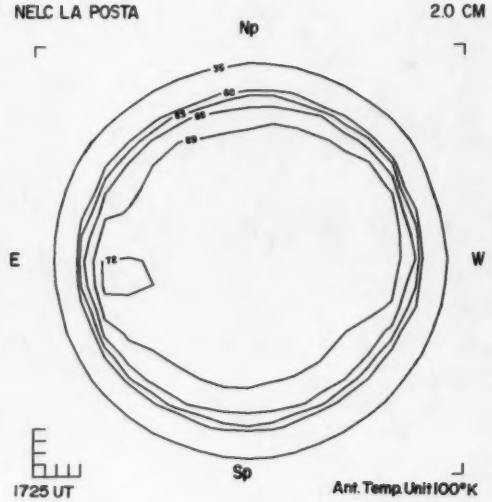
BOULDER



1530 UT

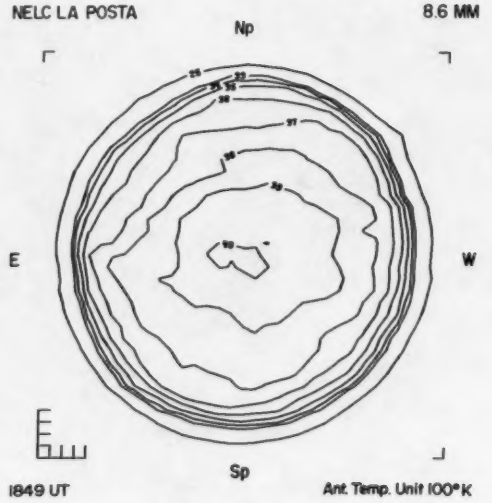
CORONA
NO DATA

NELC LA POSTA



1725 UT

NELC LA POSTA



1849 UT

MAY 13, 1975 (P=-21.70, B_o=-2.92, L_o=345.88)

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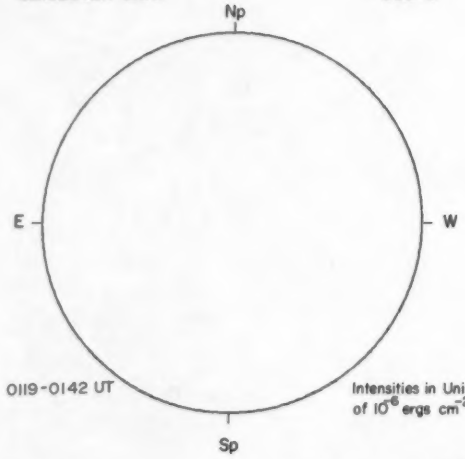
X-RAY
OSO-5

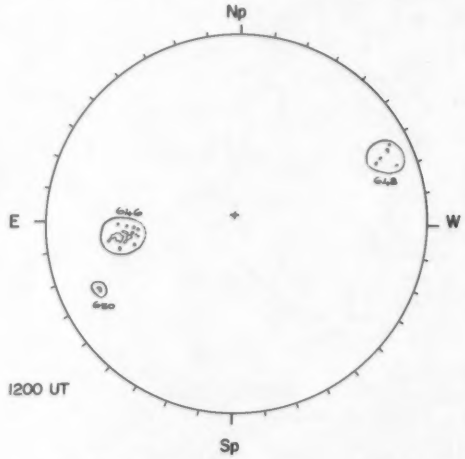


0119-0142 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

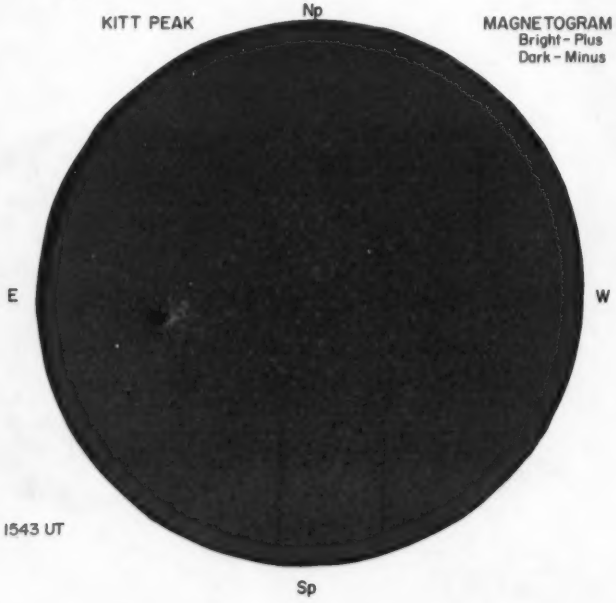


FAIR | D
46 - 1000 - 2.5

1200 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

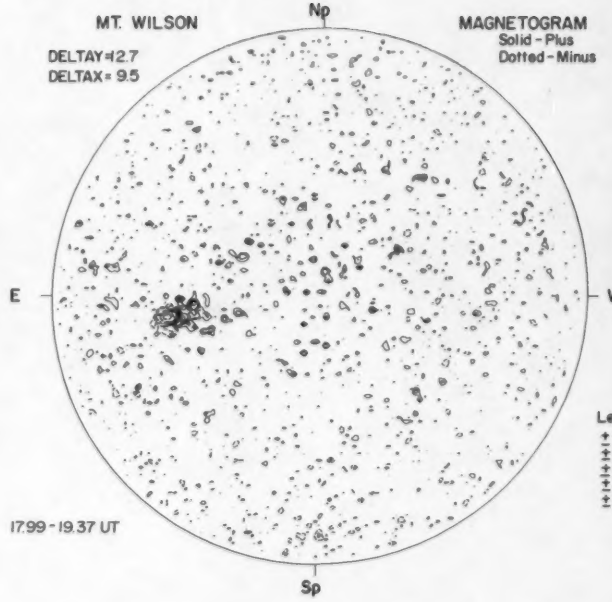


1543 UT

MT. WILSON

DELTAY=12.7
DELTAX= 9.5

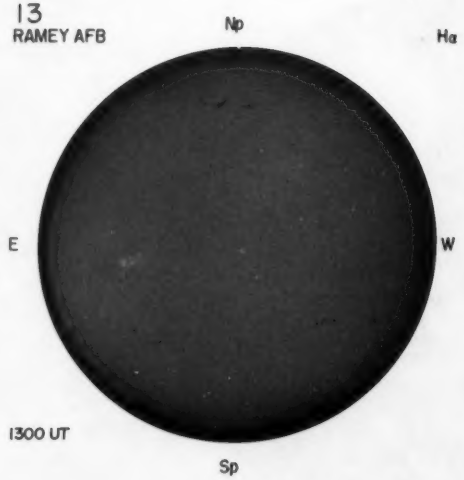
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
±5
±10
±20
±40
±80

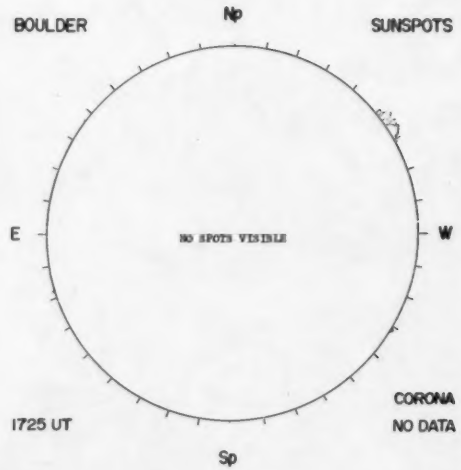
17.99 - 19.37 UT

13
RAMEY AFB



1300 UT

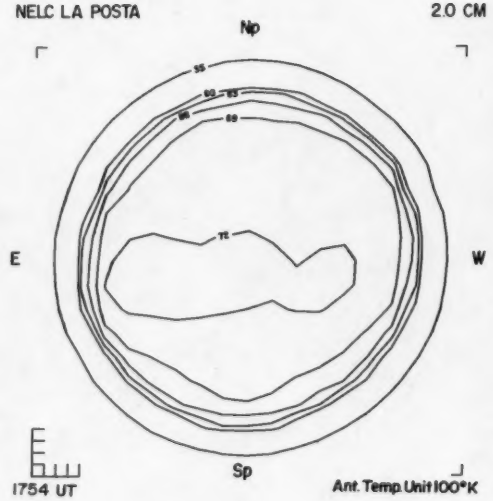
BOULDER



CORONA
NO DATA

1725 UT

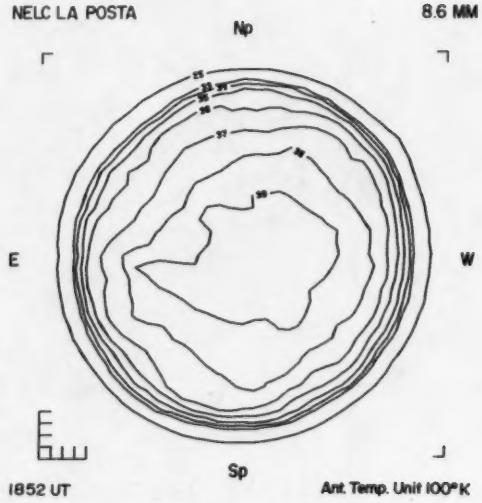
NELC LA POSTA



1754 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



1852 UT

Ant. Temp. Unit 100°K

MAY 14, 1975 (P=-21.44, B_o=-2.81, L_o=332.65)

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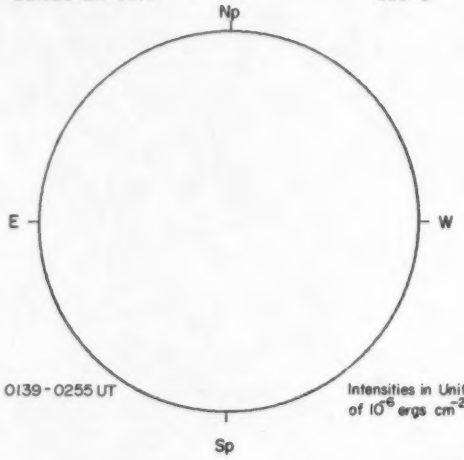
X-RAY
OSO-5

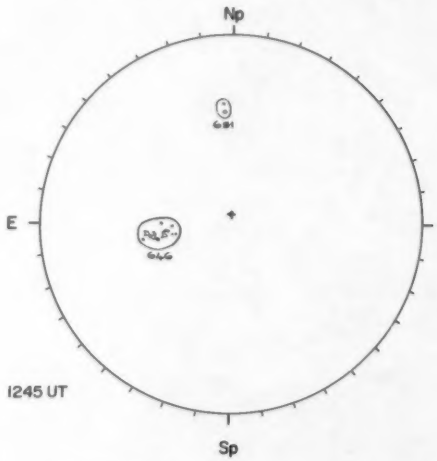


0139-0255 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

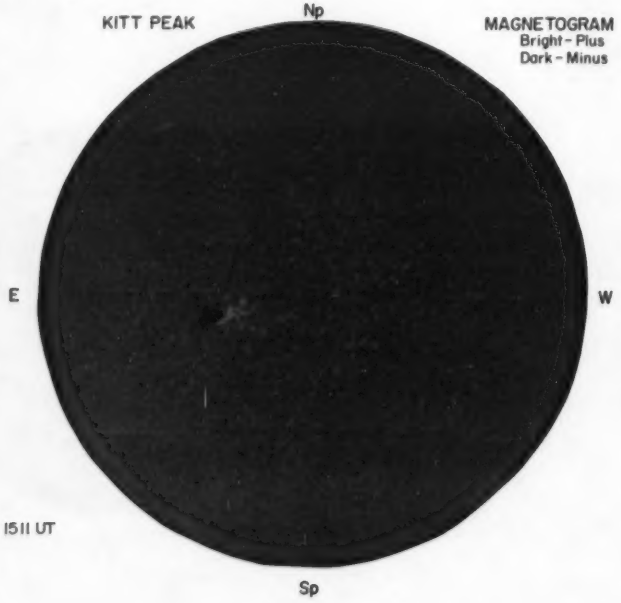


POOR D

1245 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

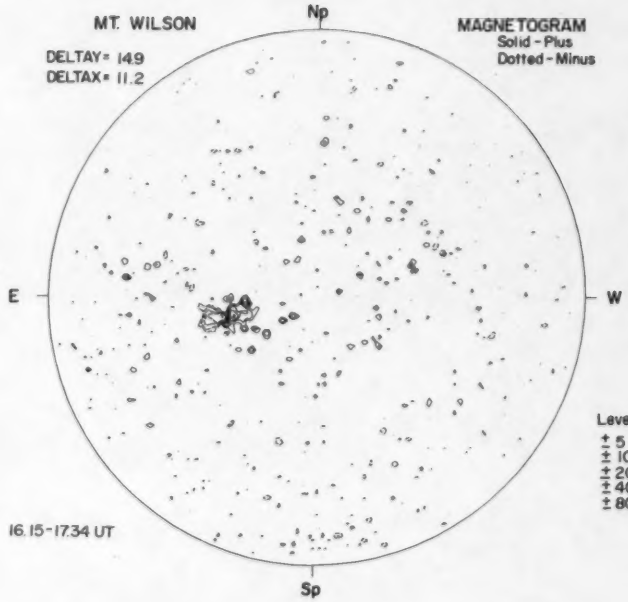


1511 UT

MT. WILSON

DELTAY= 14.9
DELTAX= 11.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus

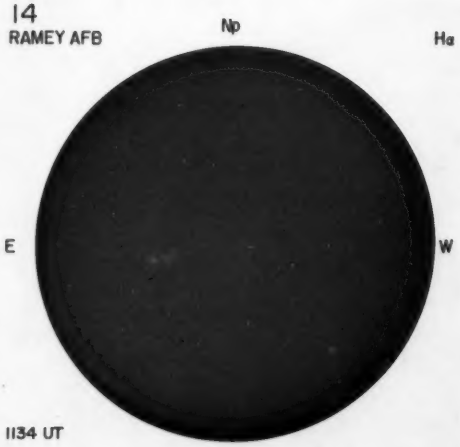


Levels
± 5
± 10
± 20
± 40
± 80

16.15-17.34 UT

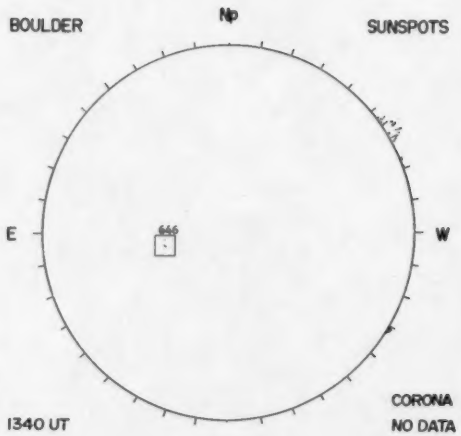
14

RAMEY AFB



1134 UT

BOULDER



1340 UT

CORONA
NO DATA

NELC LA POSTA

NELC LA POSTA

MAY 15, 1975 (P=-21.18, B_o=-2.69, L_o=319.43)

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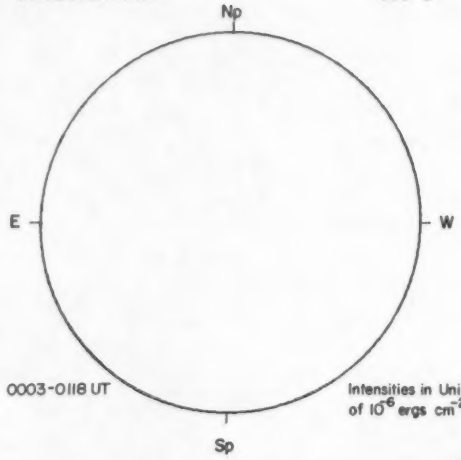
X-RAY
OSO-5

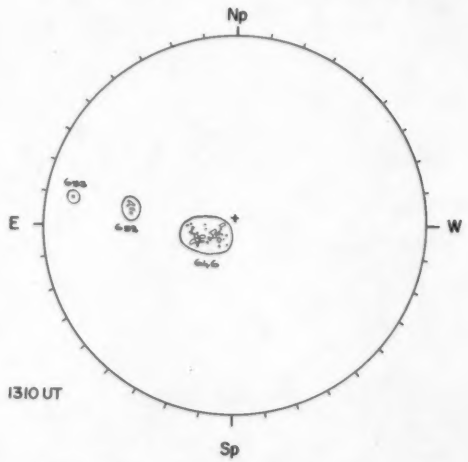


0003-0118 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

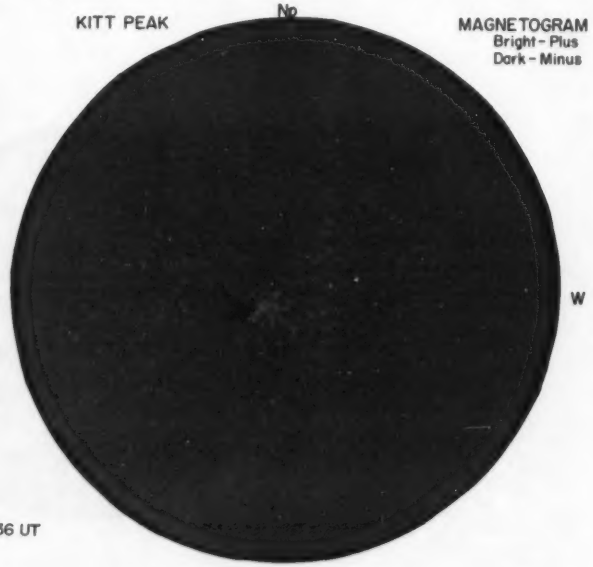


GOOD | S

1310 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

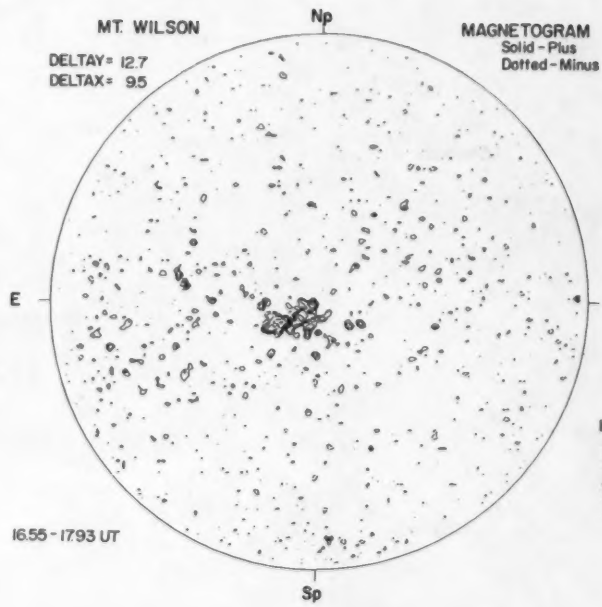


1436 UT

MT. WILSON

DELTAY= 12.7
DELTAX= 9.5

MAGNETOGRAM
Solid - Plus
Dotted - Minus

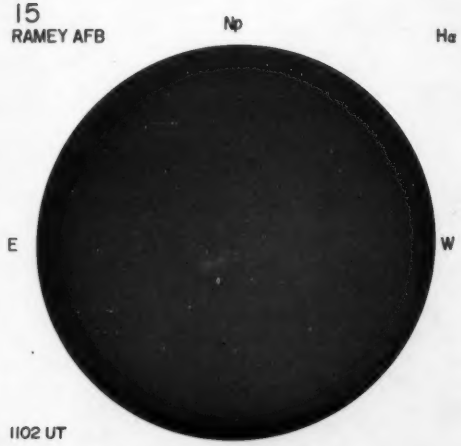


Levels
±5
±10
±20
±40
±80

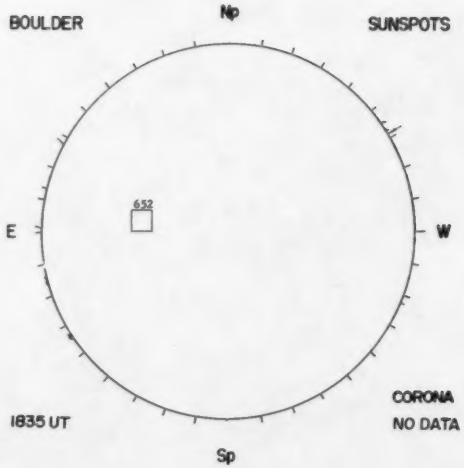
1655-1793 UT

15

RAMEY AFB



BOULDER



NELC LA POSTA

NELC LA POSTA

MAY 16, 1975 (P=-20.90, B_o=-2.58, L_o=306.20)

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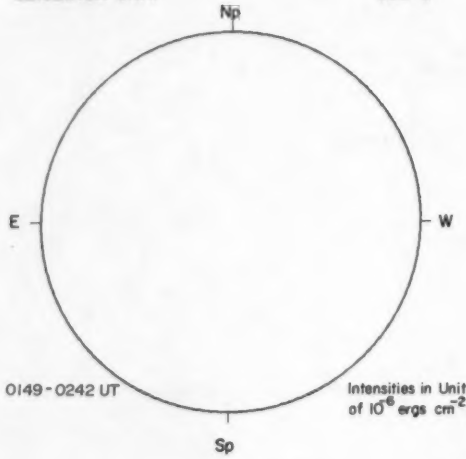
X-RAY
OSO-5

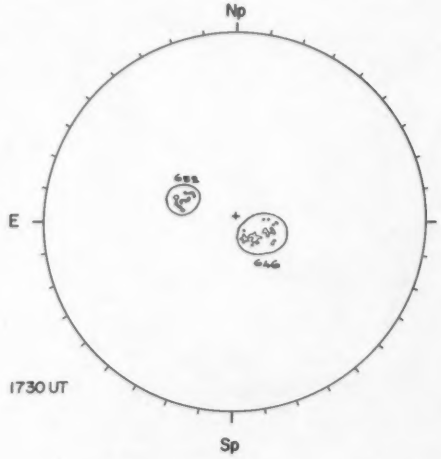


0149-0242 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCULUM REPORT

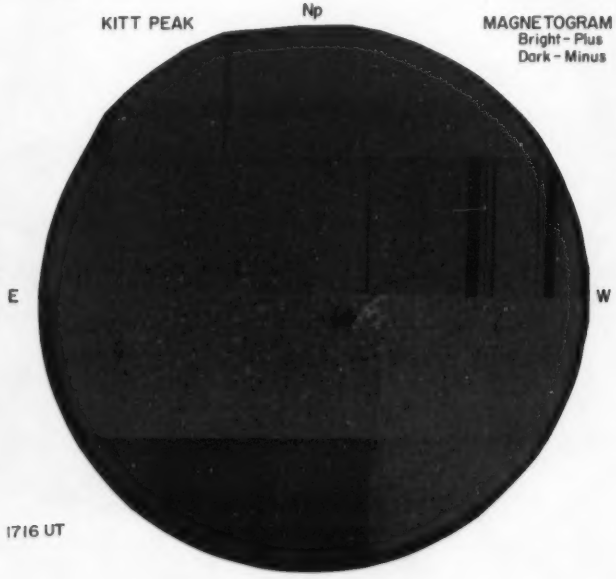


FAIR | M

1730 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

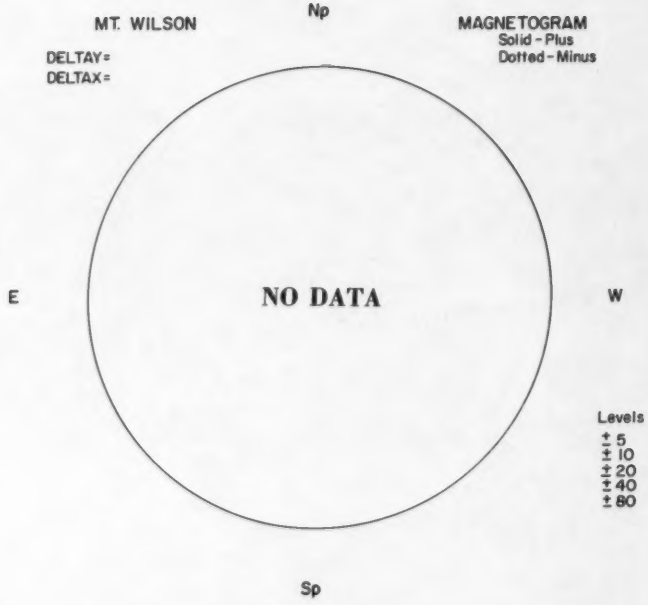


1716 UT

MT. WILSON

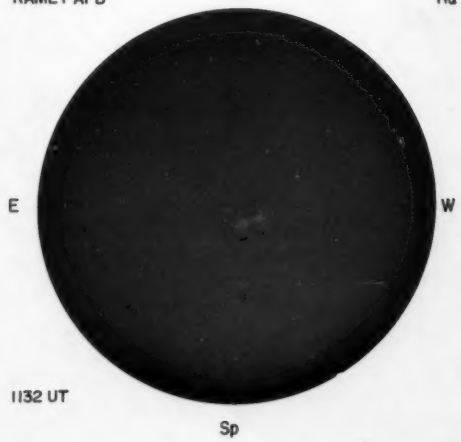
DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus



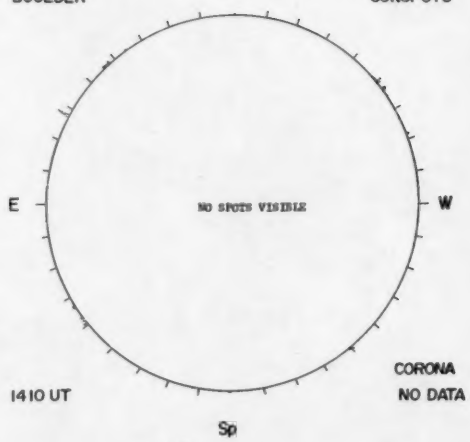
Levels
± 5
± 10
± 20
± 40
± 80

16
RAMEY AFB



1132 UT

BOULDER

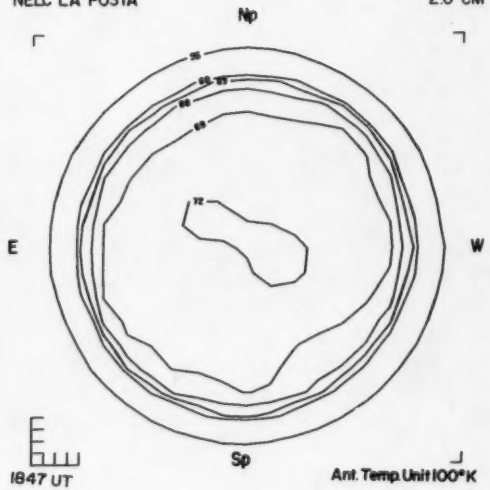


1410 UT

CORONA
NO DATA

NELC LA POSTA

2.0 CM

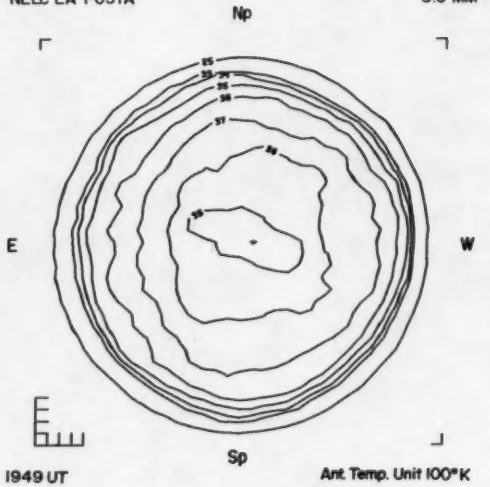


1847 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



1949 UT

Ant. Temp. Unit 100°K

MAY 17, 1975 (P = -20.62, B_o = -2.47, L_o = 292.98)

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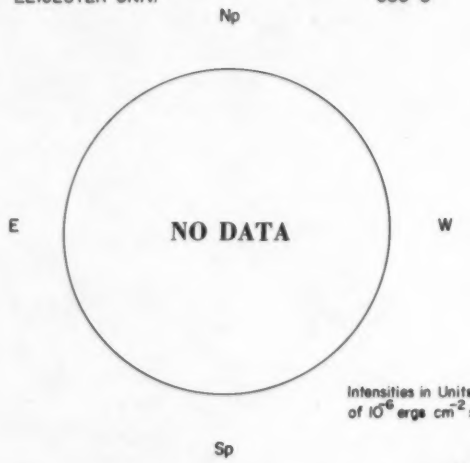
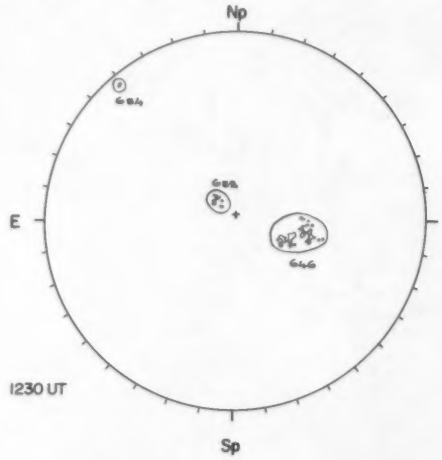
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

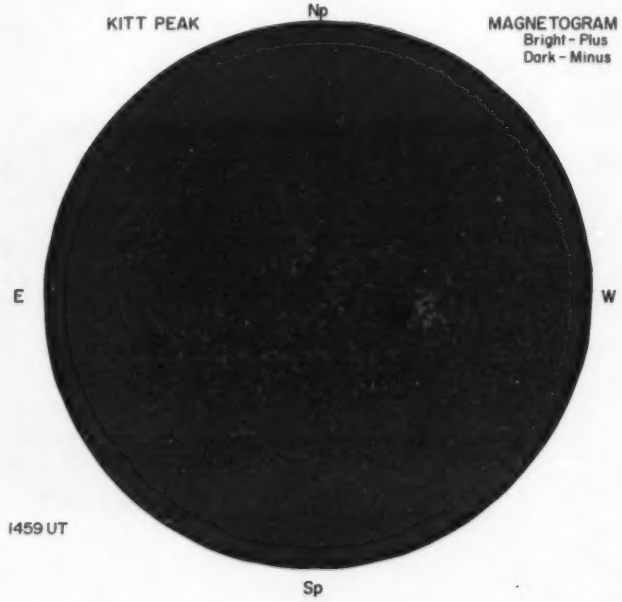
CALCIUM REPORT



GOOD | M

1230 UT

KITT PEAK

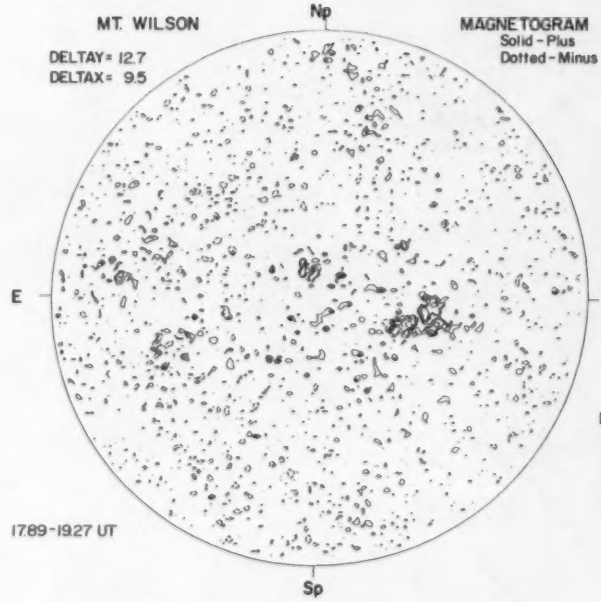


MAGNETOGRAM
Bright - Plus
Dark - Minus

1459 UT

MT. WILSON

DELTAY = 12.7
DELTAX = 9.5



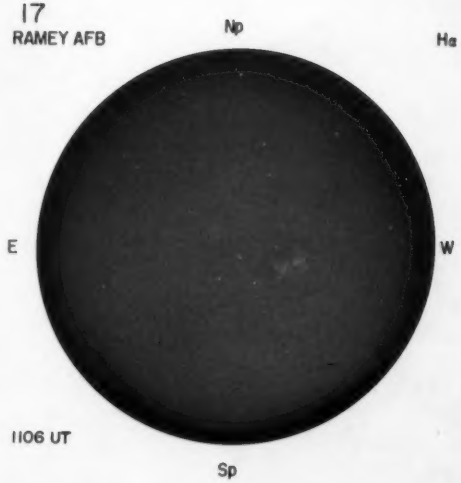
MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

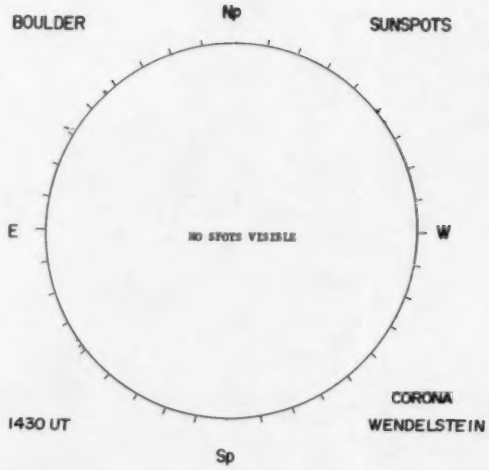
1789-1927 UT

17

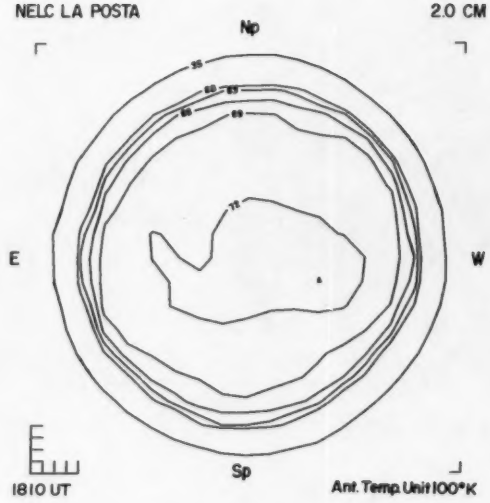
RAMEY AFB



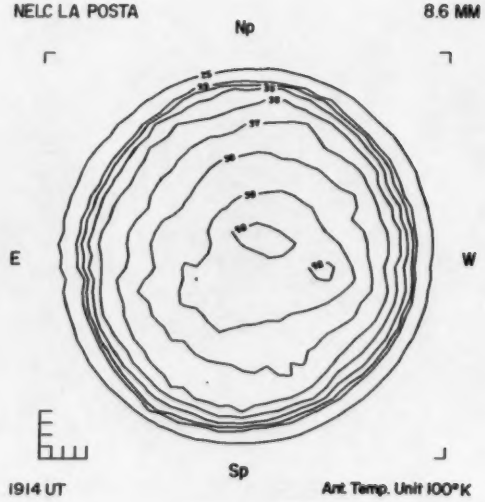
BOULDER



NELC LA POSTA



NELC LA POSTA



MAY 18, 1975 (P=-20.33, B_o=-2.35, L_o=279.75)

UNIV. COLLEGE LONDON
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X-RAY
OSO-5

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

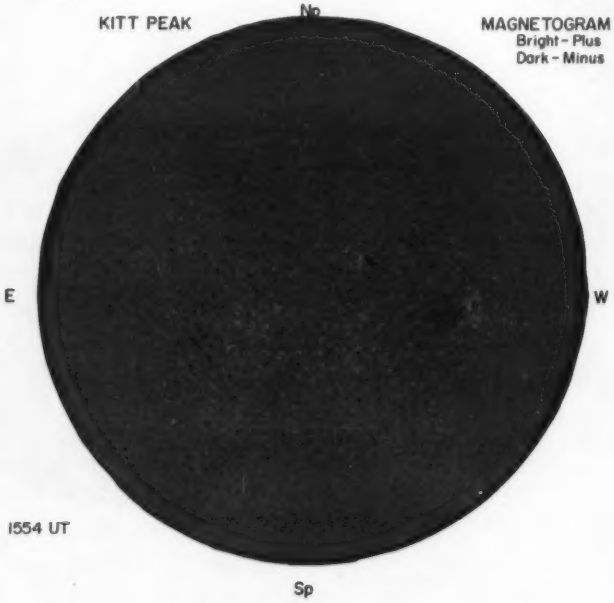
McMATH-HULBERT

CALCIUM REPORT

1200 UT

EXCEL D
46 - 0700 - 2.5

KITT PEAK

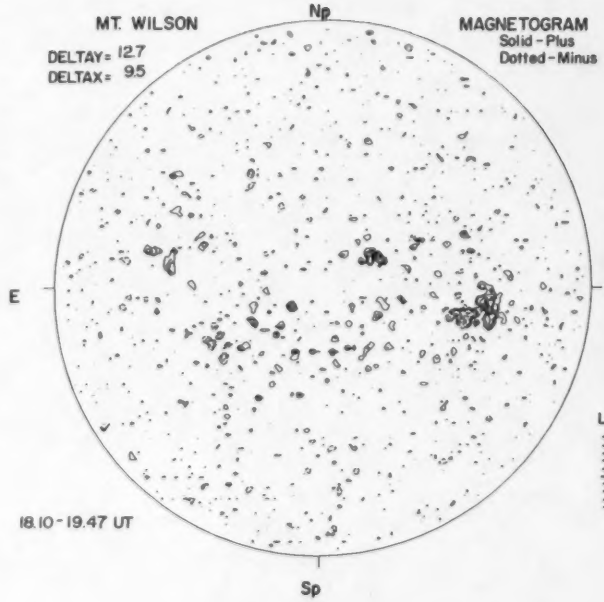


MAGNETOGRAM
Bright - Plus
Dark - Minus

1554 UT

MT. WILSON

DELTAY= 12.7
DELTAX= 9.5



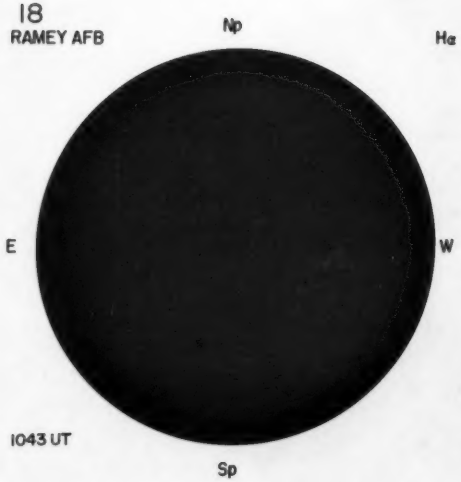
MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

18.10 - 19.47 UT

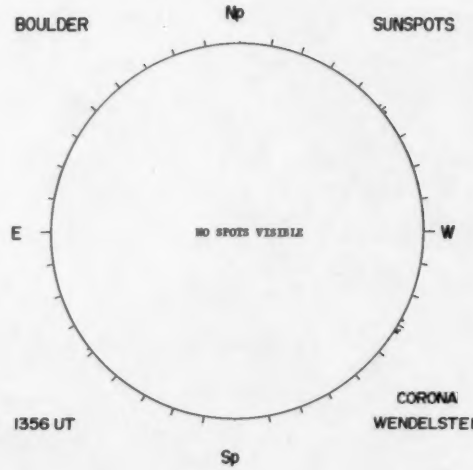
18

RAMEY AFB



1043 UT

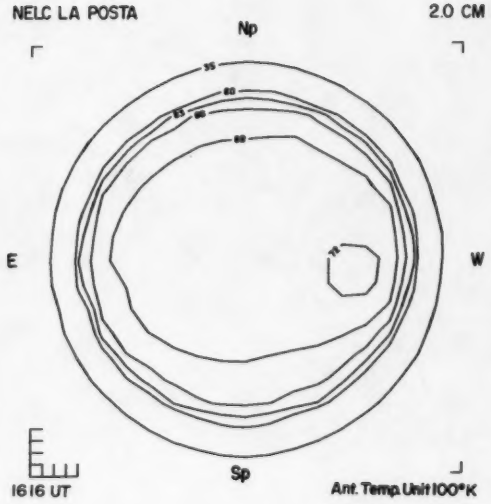
BOULDER



1356 UT

CORONA
WENDELSTEIN

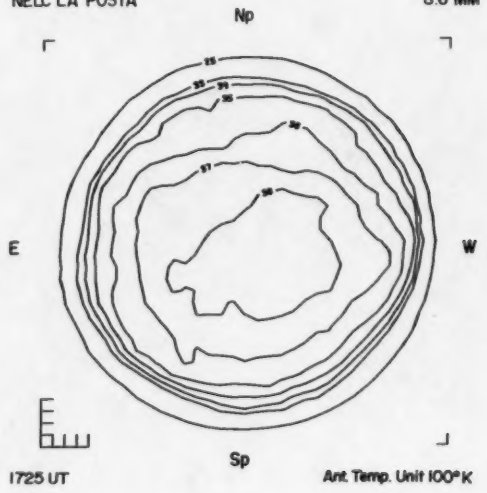
NELC LA POSTA



1616 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



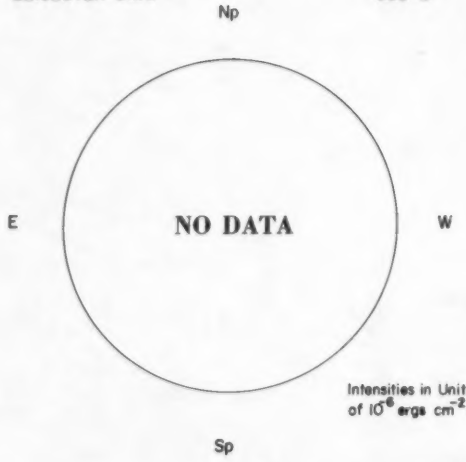
1725 UT

Ant. Temp. Unit 100°K

MAY 19, 1975 (P=-20.04, B_o=-2.24, L_o=266.52)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

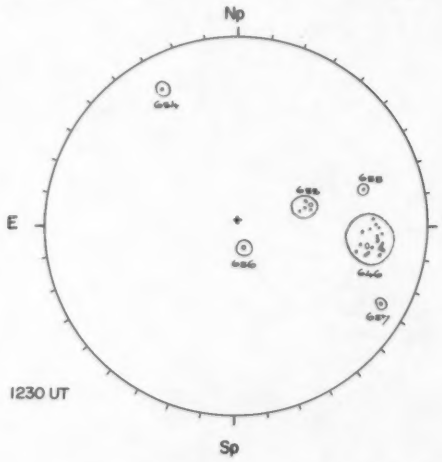
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

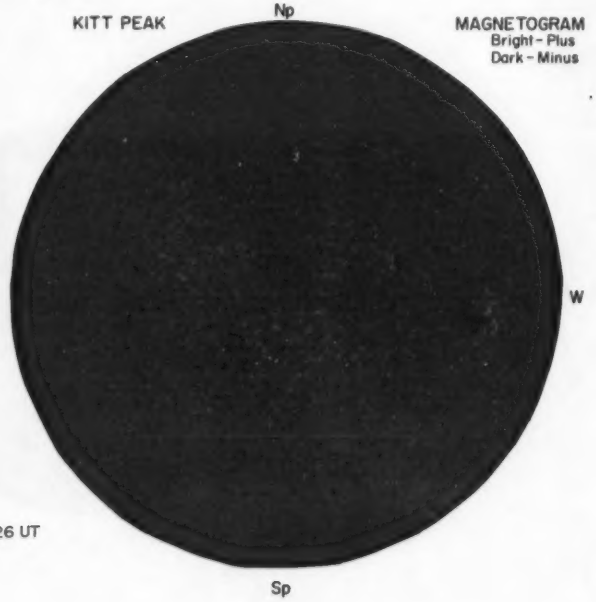


1230 UT

FAIR | D
46 - 0700 - 2.5
52 - 0200 - 2.5

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

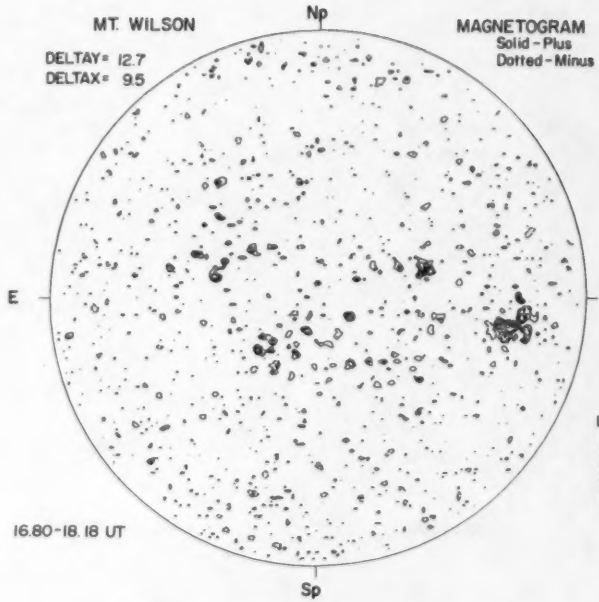


1526 UT

MT. WILSON

DELTAY= 12.7
DELTAX= 9.5

MAGNETOGRAM
Solid - Plus
Dotted - Minus

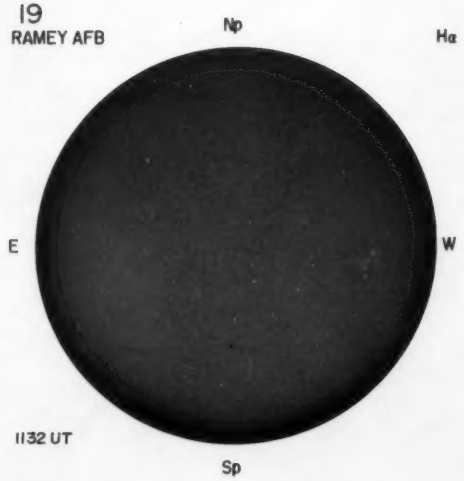


Levels
± 5
± 10
± 20
± 40
± 80

16.80-18.18 UT

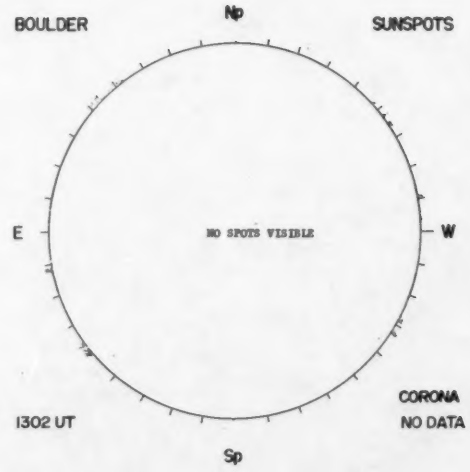
19

RAMEY AFB



1132 UT

BOULDER

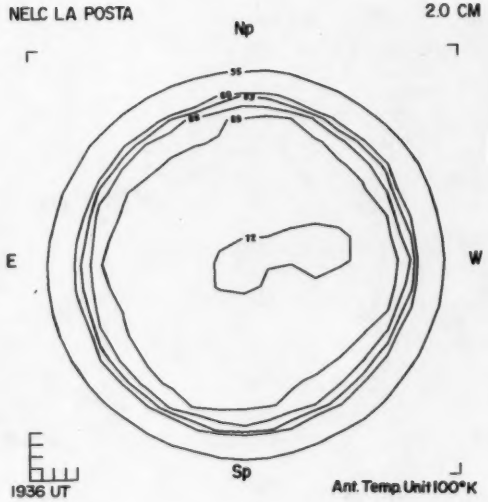


1302 UT

CORONA
NO DATA

NELC LA POSTA

2.0 CM

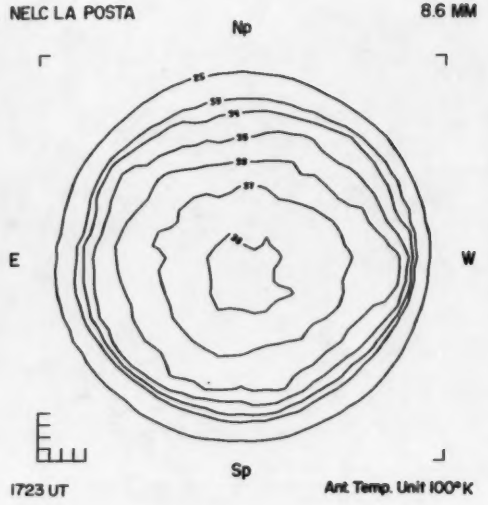


1936 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



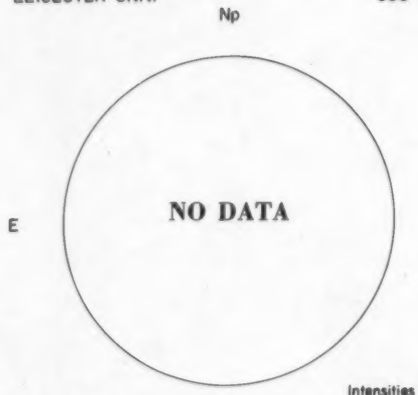
1723 UT

Ant. Temp. Unit 100°K

MAY 20, 1975 (P=-19.74, B_o=-2.12, L_o=253.29)

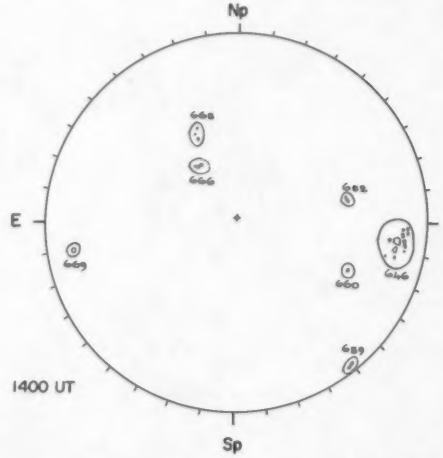
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

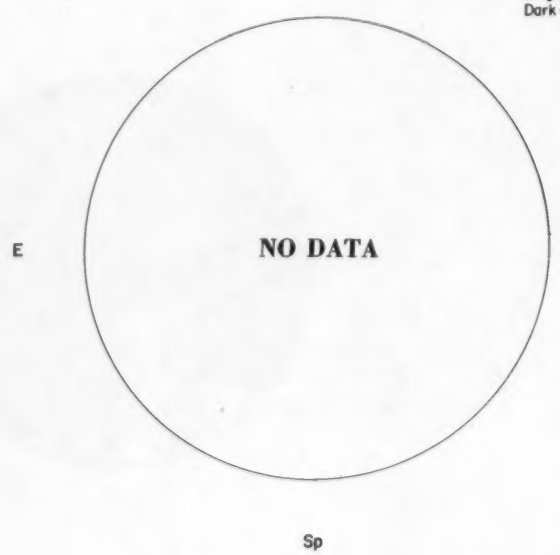


CALCIUM REPORT

GOOD	S
46 - 0800 - 2.5	
52 - 0200 - 2.5	
69 - 0100 - 2.5	

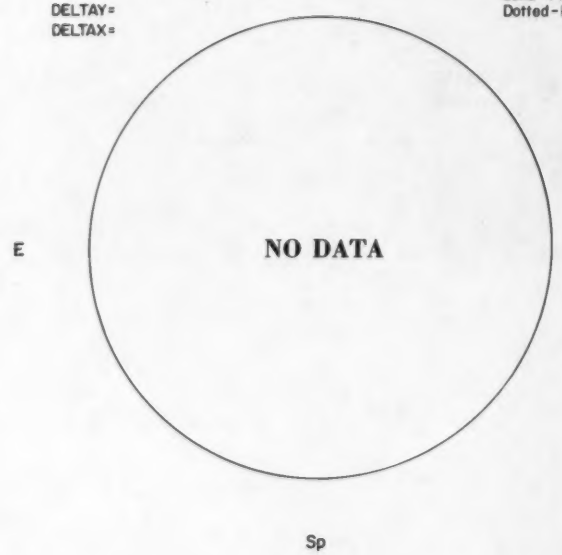
KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus



MT. WILSON

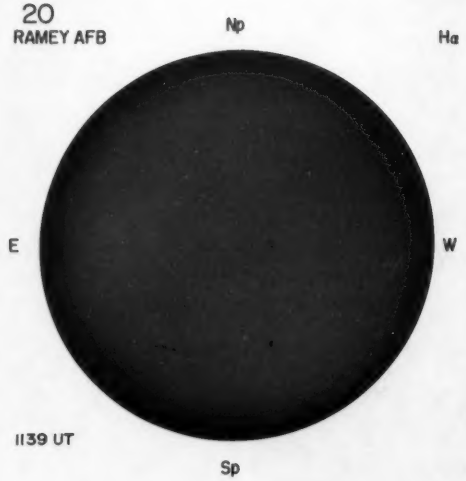
DELTAY=
DELTAX=



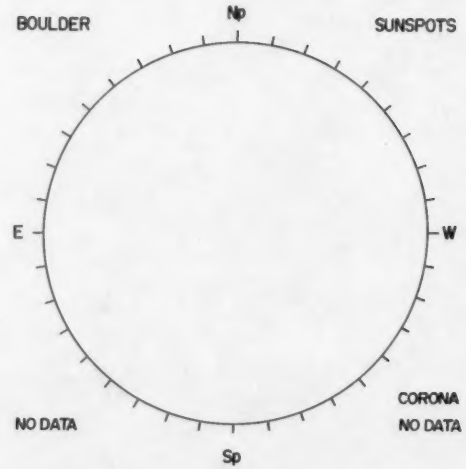
MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

20
RAMEY AFB



BOULDER



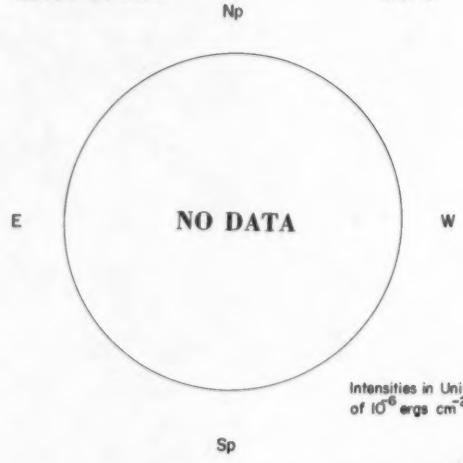
NELC LA POSTA

NELC LA POSTA

MAY 21, 1975 (P=-19.44, B_o=-2.00, L_o=240.07)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

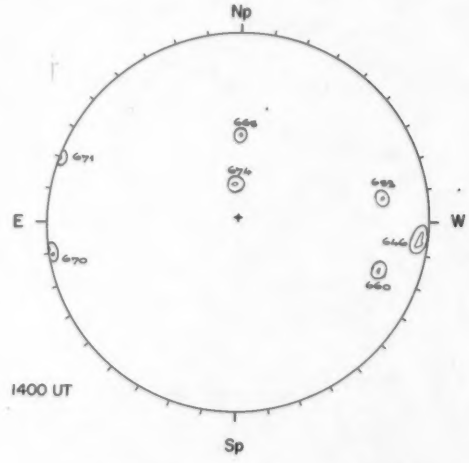
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

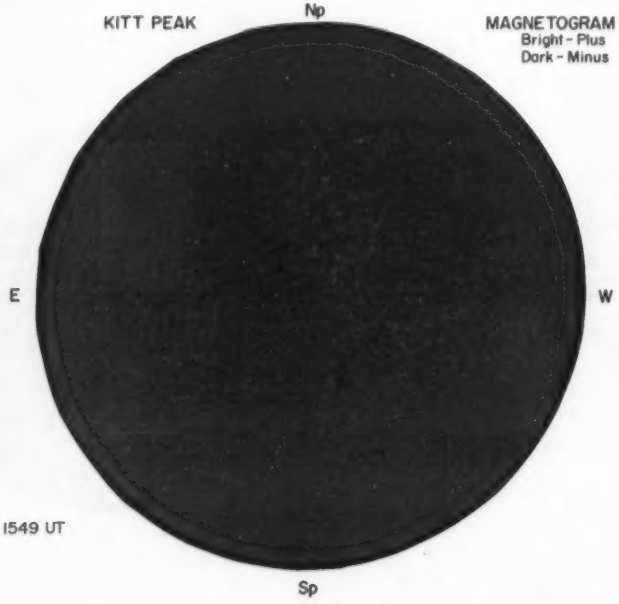
CALCIUM REPORT



FAIR | S

1400 UT

KITT PEAK

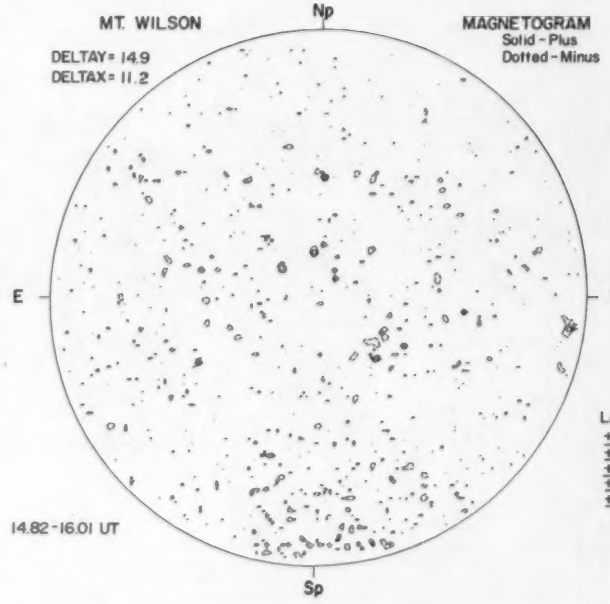


MAGNETOGRAM
Bright - Plus
Dark - Minus

1549 UT

MT. WILSON

DELTAY= 14.9
DELTAX= 11.2



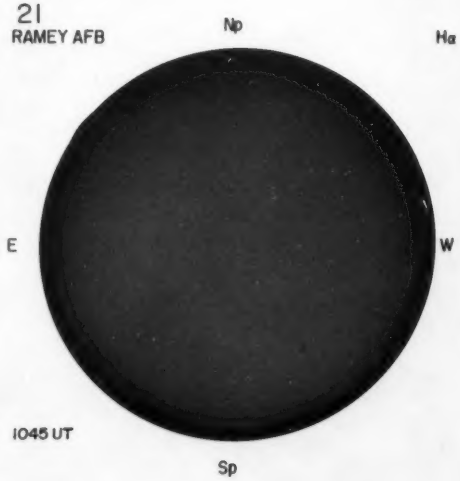
MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

14.82-16.01 UT

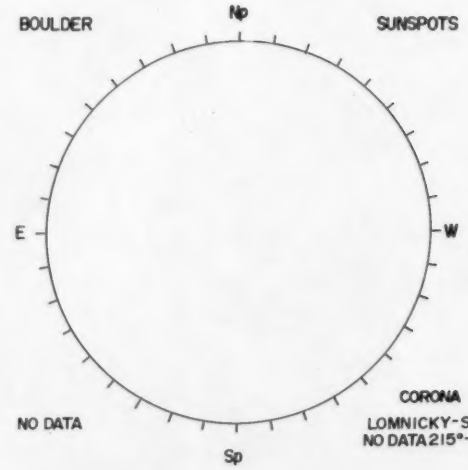
21

RAMEY AFB



1045 UT

BOULDER



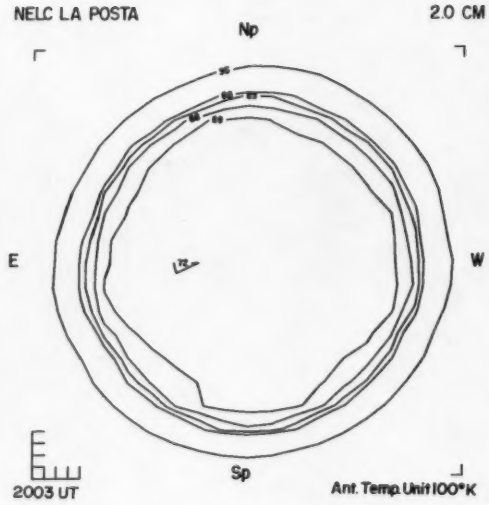
NO DATA

CORONA

LOMNICKY-STIT

NO DATA 215°-355°

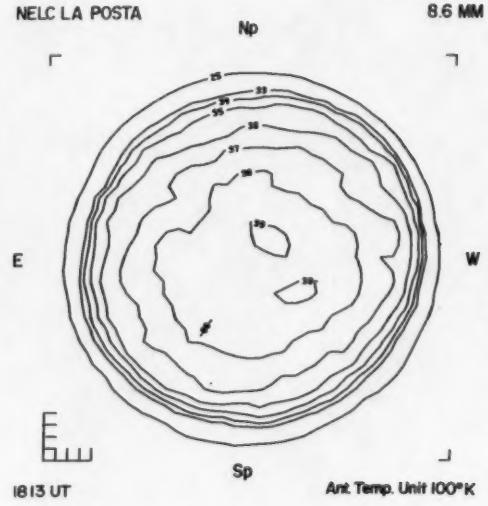
NELC LA POSTA



2003 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



1813 UT

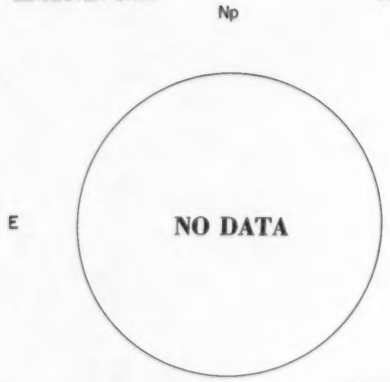
Ant. Temp. Unit 100°K

65
May 75

MAY 22, 1975 (P=-19.12, B_o=-1.89, L_o=226.84)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

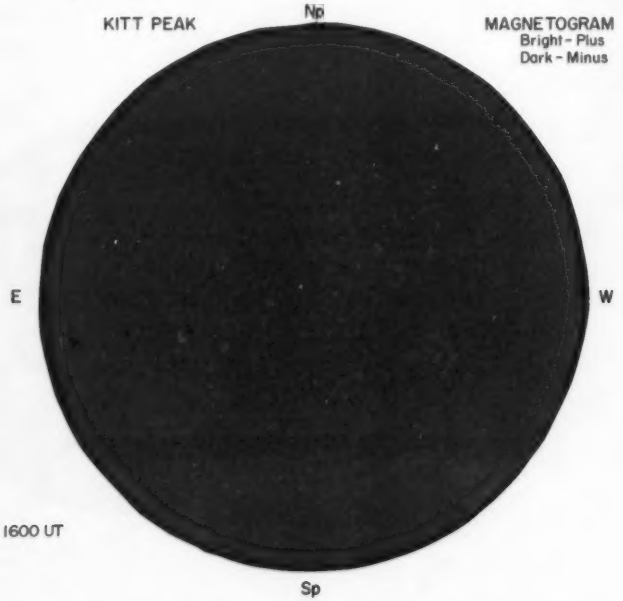
McMATH-HULBERT

1545 UT

CALCIUM REPORT

FAIR | M
75 - 0300 - 2.5

KITT PEAK

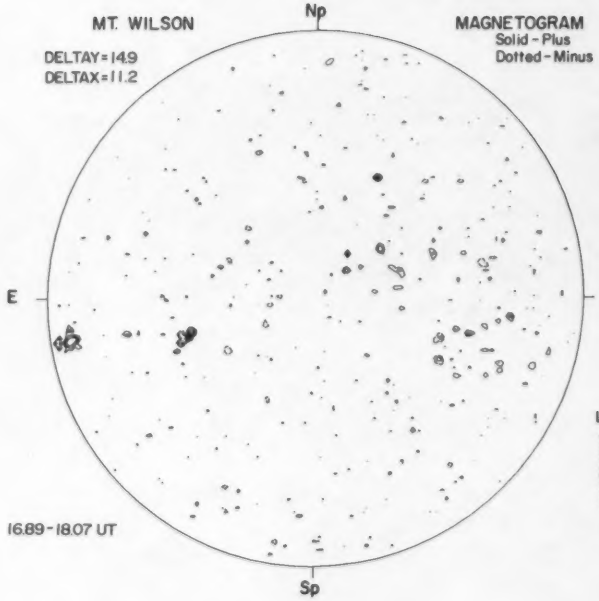


MAGNETOGRAM
Bright - Plus
Dark - Minus

1600 UT

MT. WILSON

DELTAY = 14.9
DELTAX = 11.2



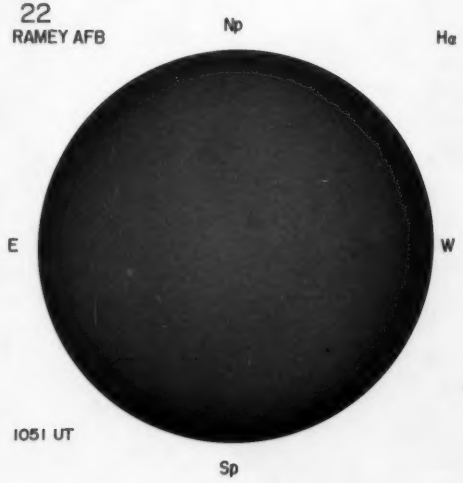
MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

16.89 - 18.07 UT

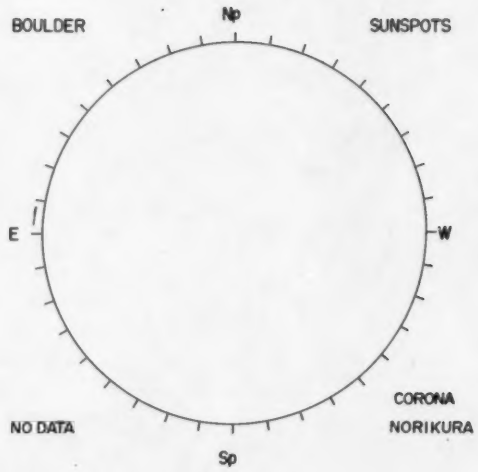
22

RAMEY AFB



1051 UT

BOULDER



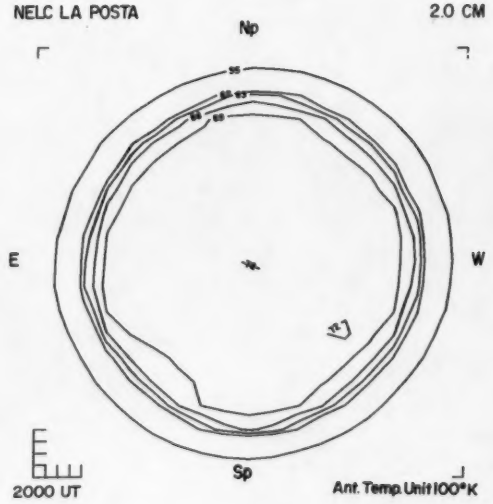
NO DATA

CORONA

NORIKURA

NELC LA POSTA

2.0 CM

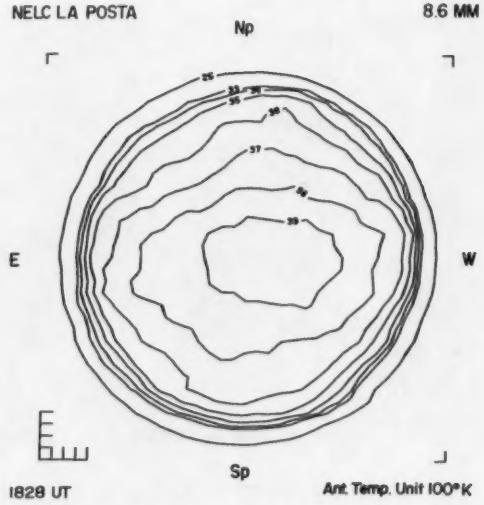


2000 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



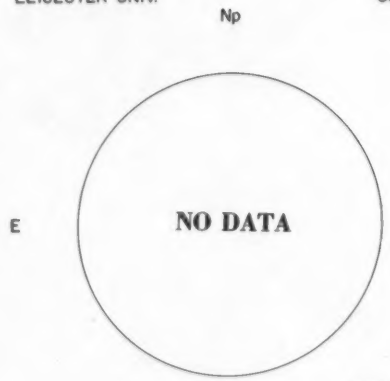
1828 UT

Ant. Temp. Unit 100°K

MAY 23, 1975 (P=-18.81, B_o=-1.77, L_o=213.61)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

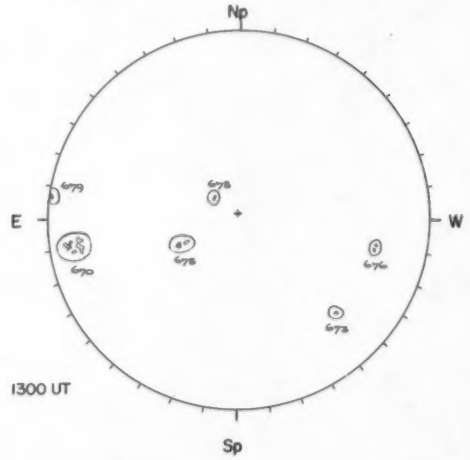
X-RAY
OSO-5



Intensities in Units
of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

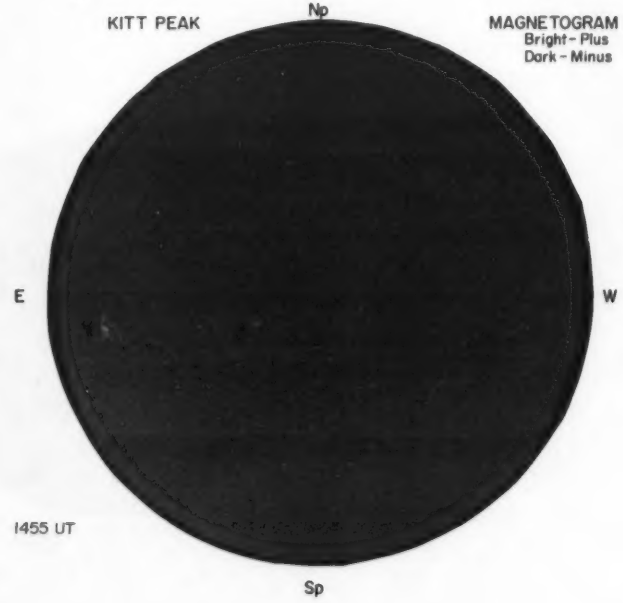


FAIR S

1300 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

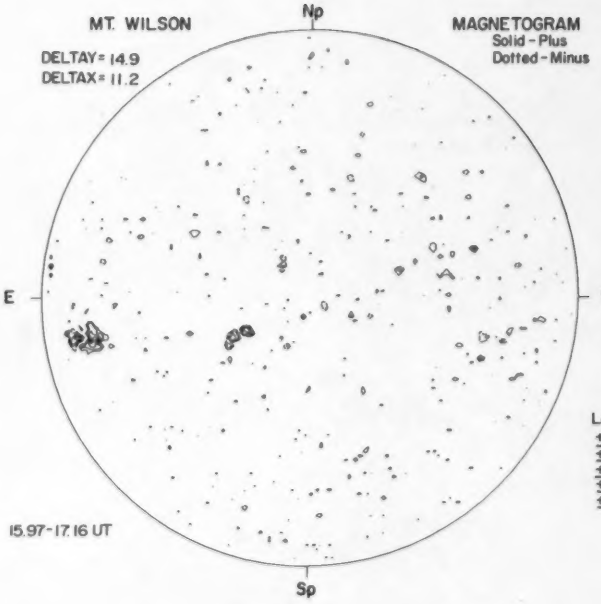


1455 UT

MT. WILSON

DELTAY= 14.9
DELTAX= 11.2

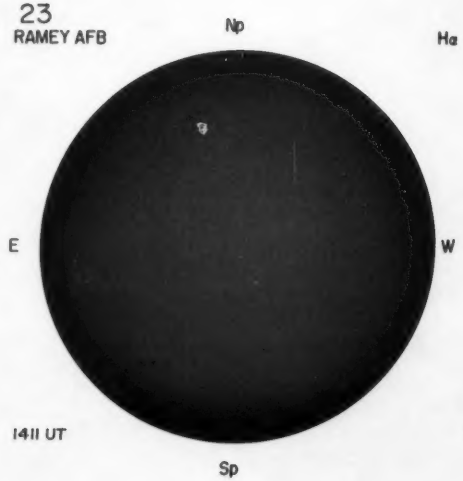
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
± 5
± 10
± 20
± 40
± 80

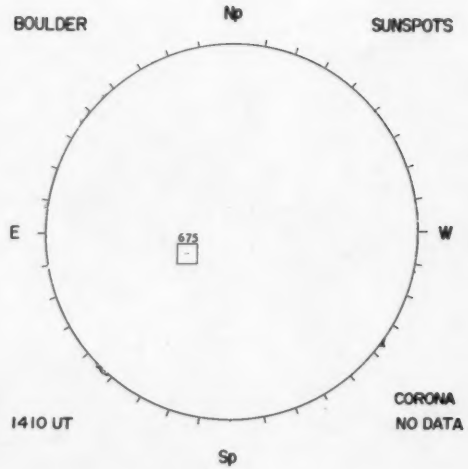
15.97-17.16 UT

23
RAMEY AFB



1411 UT

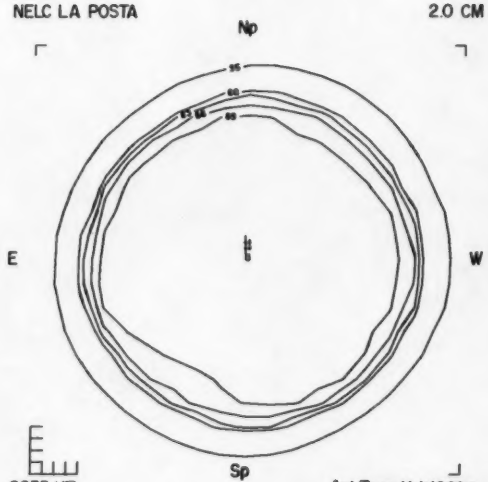
BOULDER



1410 UT

CORONA
NO DATA

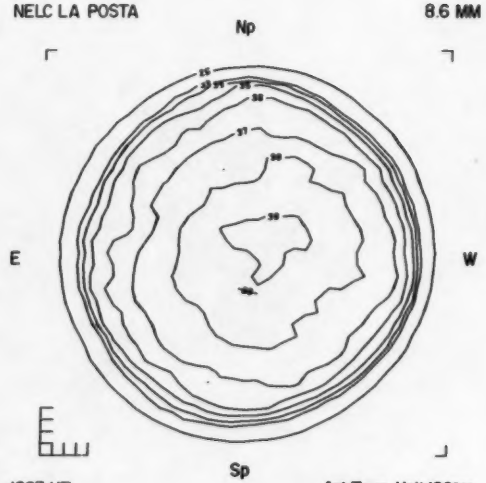
NELC LA POSTA 2.0 CM



2055 UT

Ant. Temp. Unit 100°K

NELC LA POSTA 8.6 MM



1923 UT

Ant. Temp. Unit 100°K

MAY 24, 1975 (P = -18.48, B_o = -1.65, L_o = 200.38)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

Np

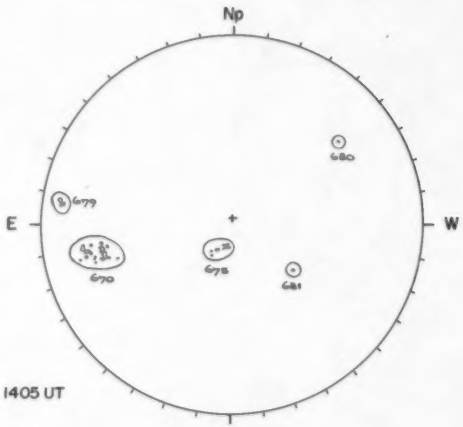
E — NO DATA — W

Sp

Intensities in Units
of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

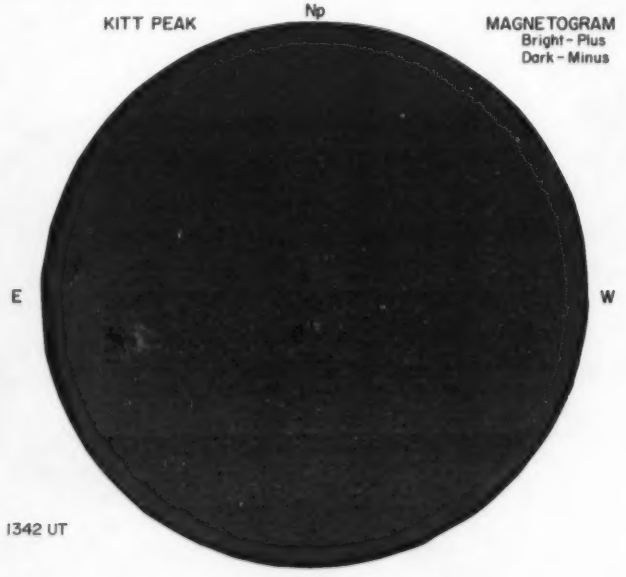
CALCIUM REPORT



GOOD | M

1405 UT

KITT PEAK

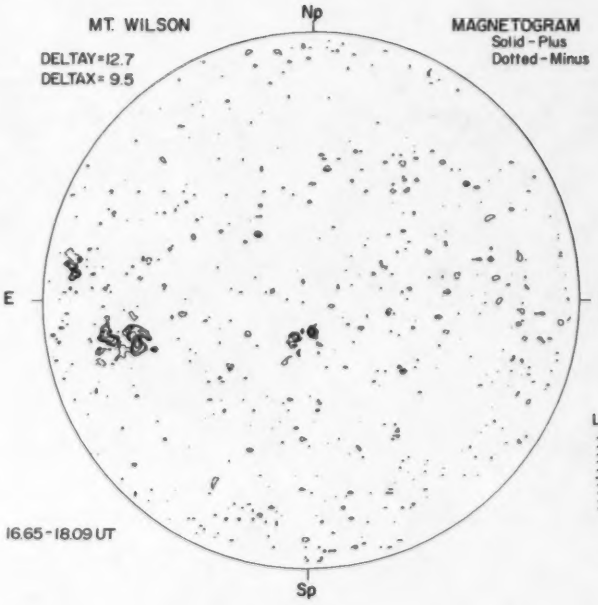


MAGNETOGRAM
Bright - Plus
Dark - Minus

1342 UT

MT. WILSON

DELTAY = 12.7
DELTAX = 9.5

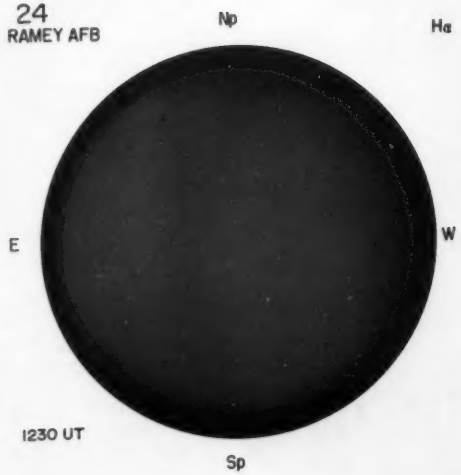


MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

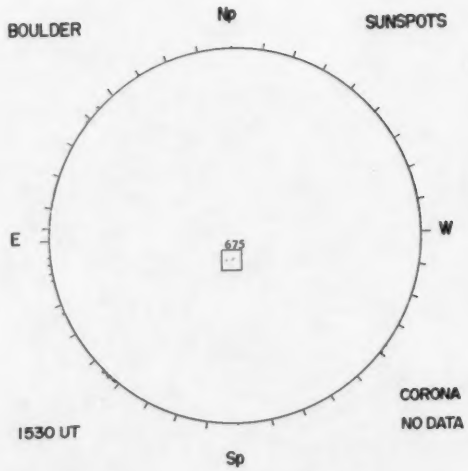
16.65 - 18.09 UT

24
RAMEY AFB



1230 UT

BOULDER

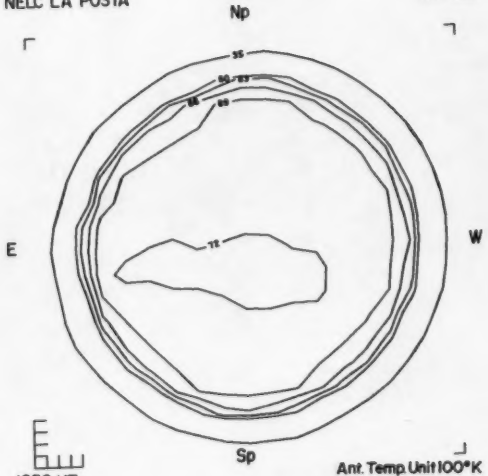


CORONA
NO DATA

1530 UT

NELC LA POSTA

2.0 CM

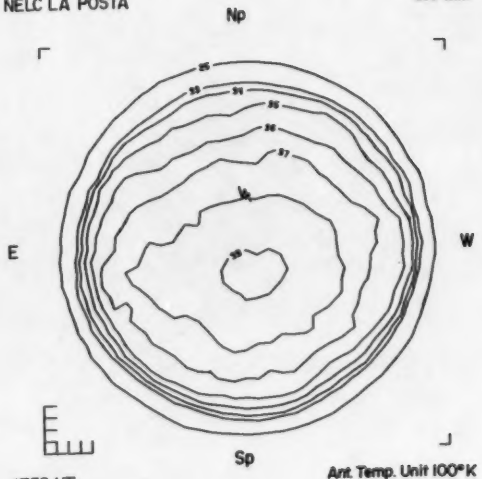


1950 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



1759 UT

Ant. Temp. Unit 100°K

71
May 75

MAY 25, 1975 (P=-18.15, B_o=-1.53, L_o=187.15)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

Np

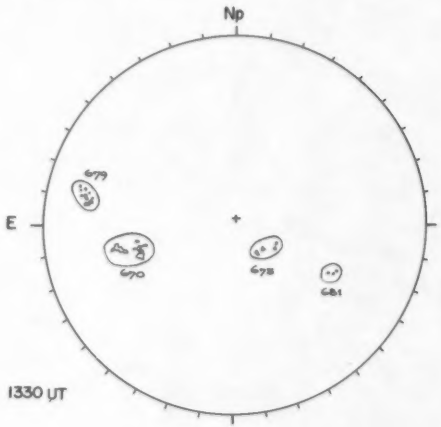
E NO DATA W

Sp

Intensities in Units
of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

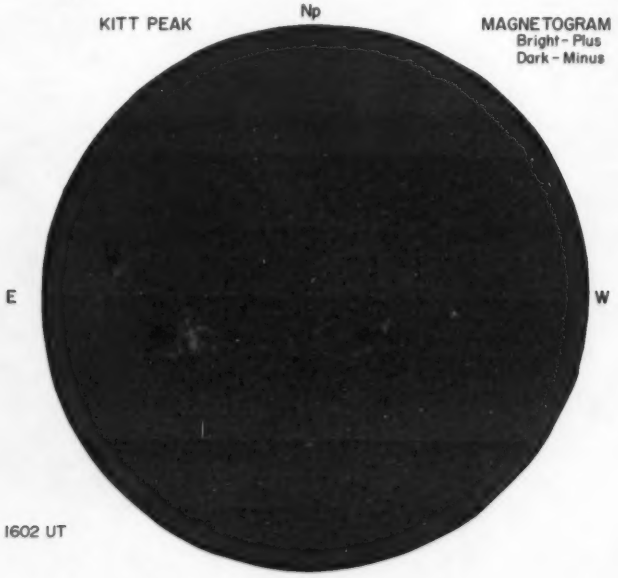
CALCIUM REPORT



FAIR M

1330 UT

KITT PEAK



MAGNETOGRAM
Bright - Plus
Dark - Minus

1602 UT

MT. WILSON

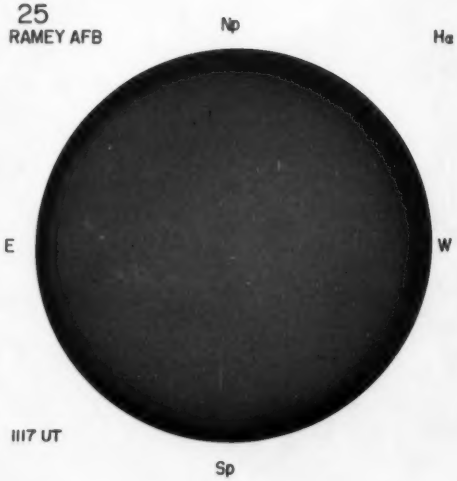
DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
±5
±10
±20
±40
±80

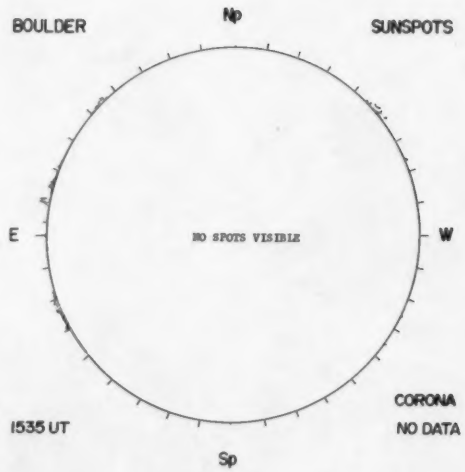
25

RAMEY AFB



1117 UT

BOULDER



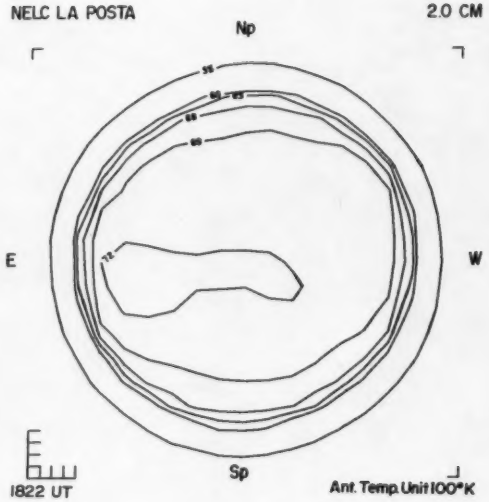
1535 UT

CORONA

NO DATA

NELC LA POSTA

2.0 CM

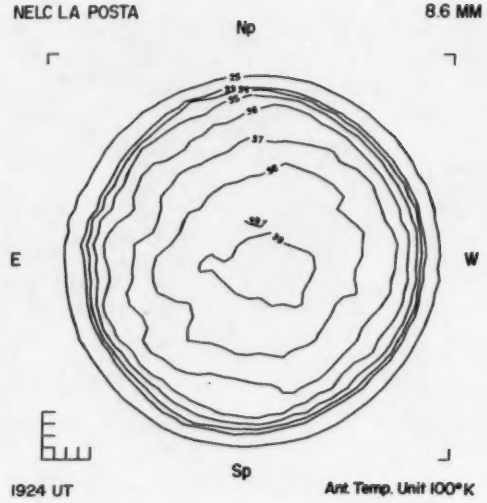


1822 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



1924 UT

Ant. Temp. Unit 100°K

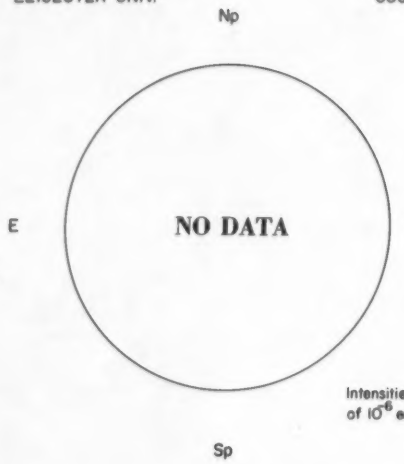
73

May 75

MAY 26, 1975 (P=-17.82, B_o=-1.41, L_o=173.91)

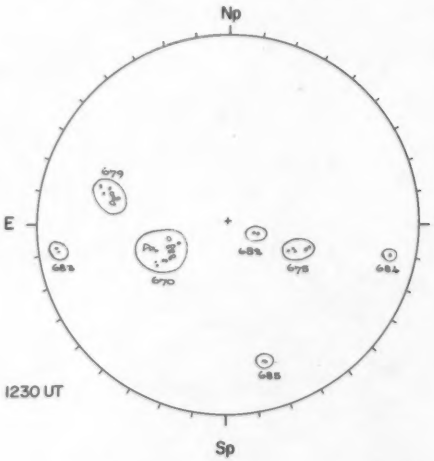
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

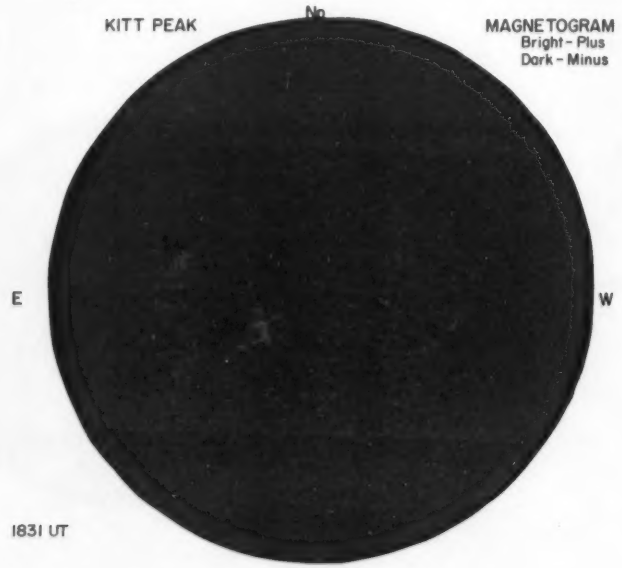


1230 UT

CALCIUM REPORT

FAIR | M

KITT PEAK

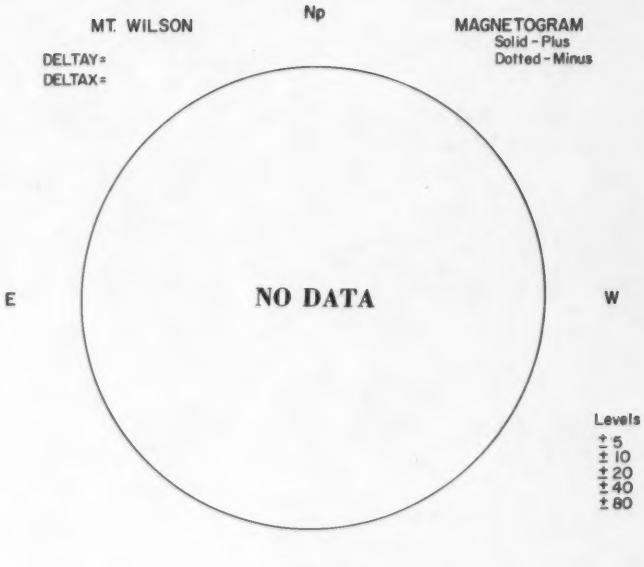


1831 UT

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTAY=
DELTAX=

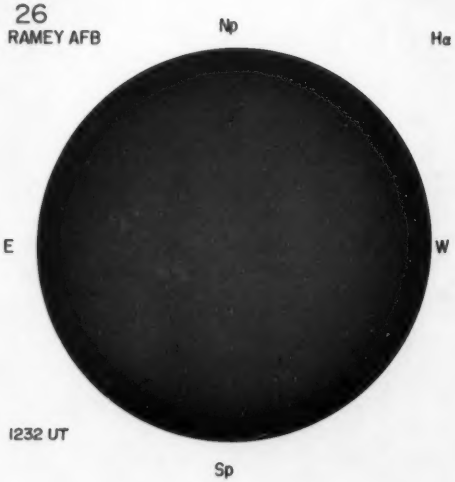


MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
±5
±10
±20
±40
±80

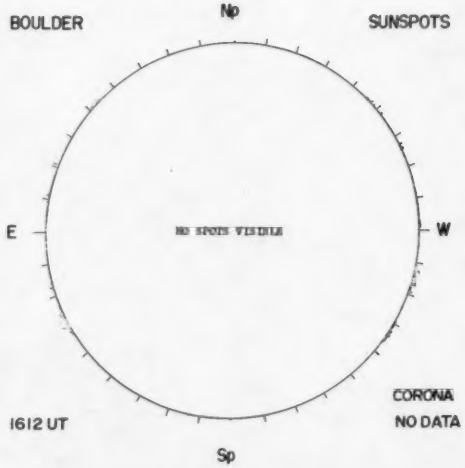
26

RAMEY AFB



1232 UT

BOULDER

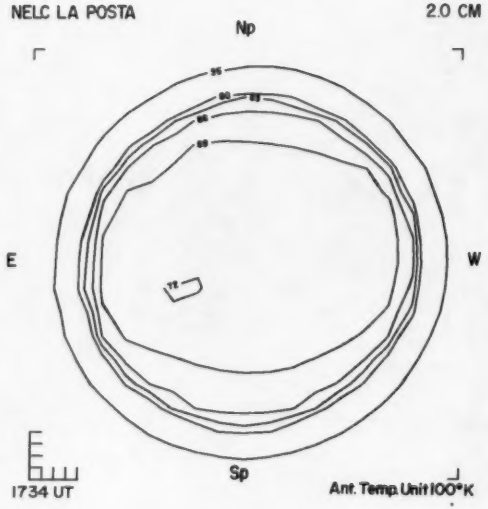


1612 UT

CORONA
NO DATA

NELC LA POSTA

2.0 CM

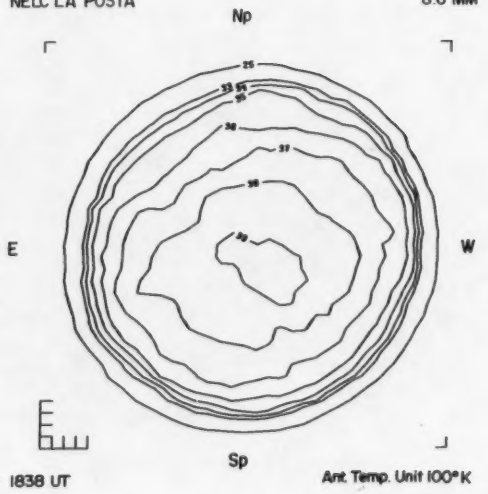


1734 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



1838 UT

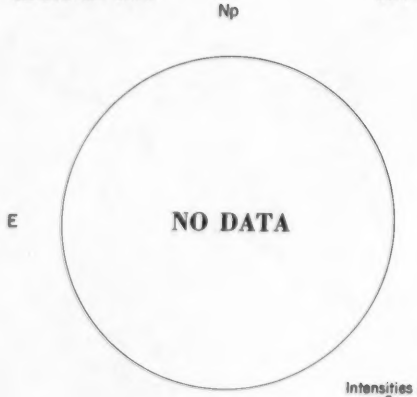
Ant. Temp. Unit 100°K

75
May 75

MAY 27, 1975 (P=-17.48, B_o=-1.29, L_o=160.68)

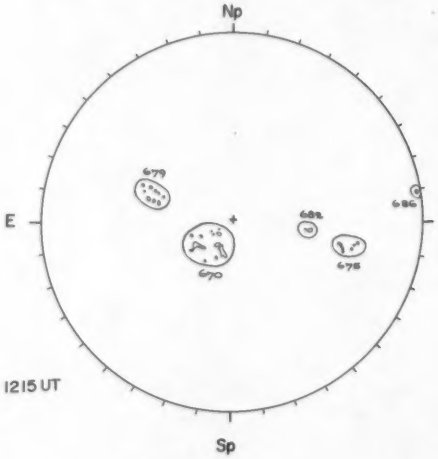
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

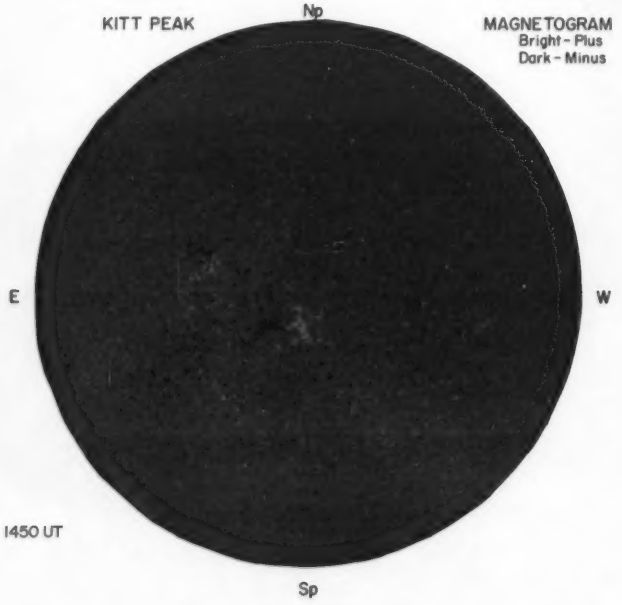


1215 UT

CALCIUM REPORT

GOOD | S

KITT PEAK



1450 UT

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

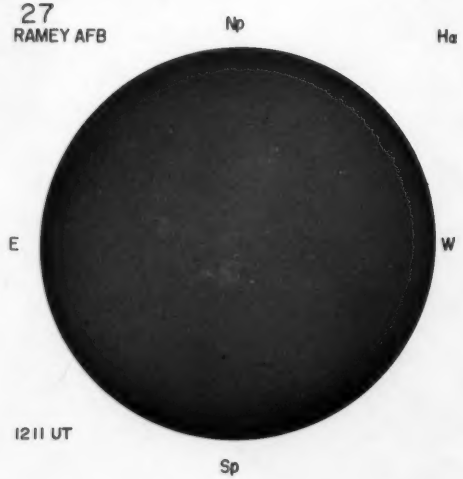
DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

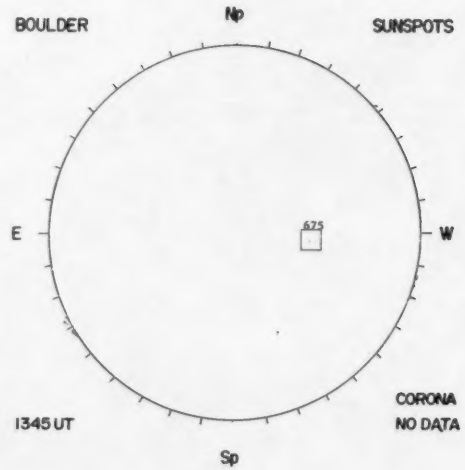
27

RAMEY AFB



1211 UT

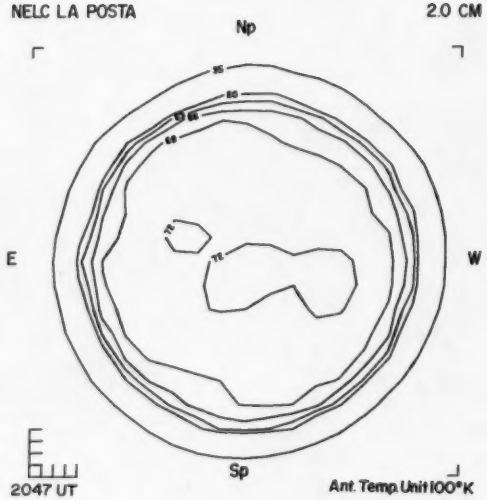
BOULDER



1345 UT

CORONA
NO DATA

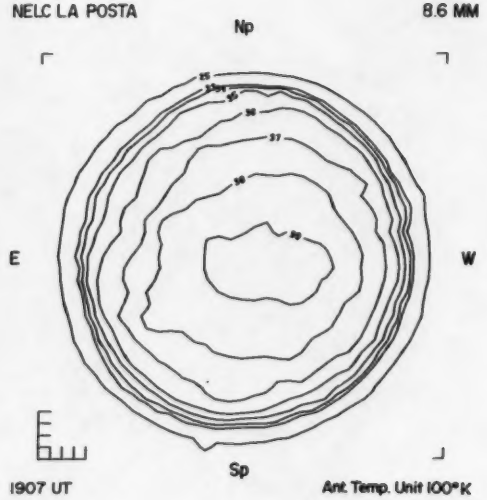
NELC LA POSTA



2047 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



1907 UT

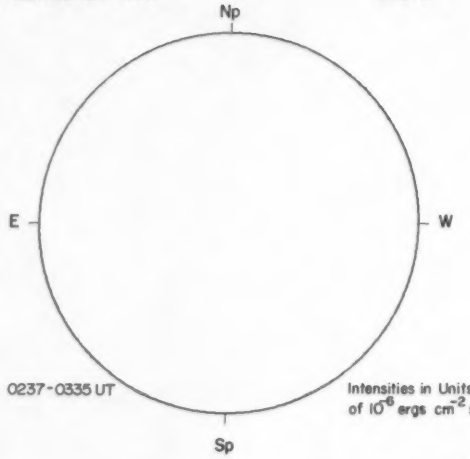
Ant. Temp. Unit 100°K

77
May 75

MAY 28, 1975 (P=-17.13, B_o=-1.18, L_o=147.45)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

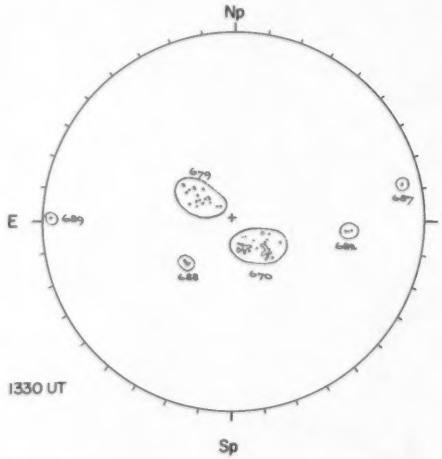


0237-0335 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

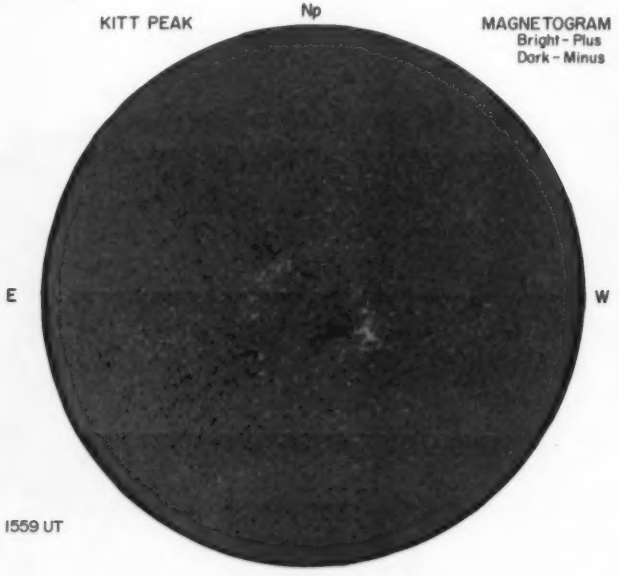


V. GOOD M

1330 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus



1559 UT

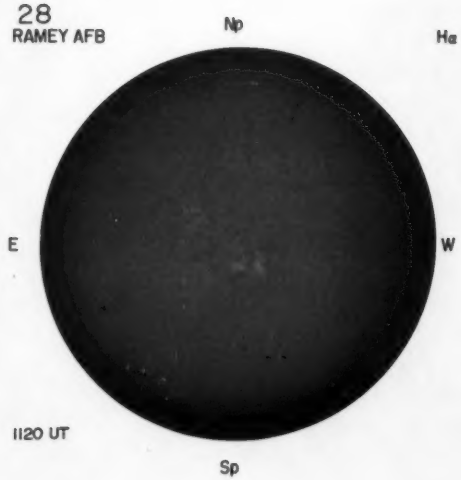
MT. WILSON

DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus

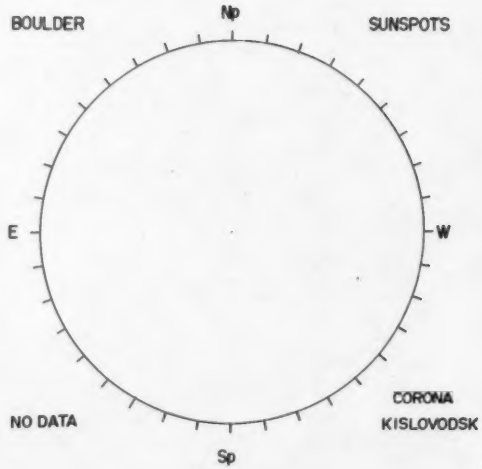
Levels
± 5
± 10
± 20
± 40
± 80

28
RAMEY AFB



1120 UT

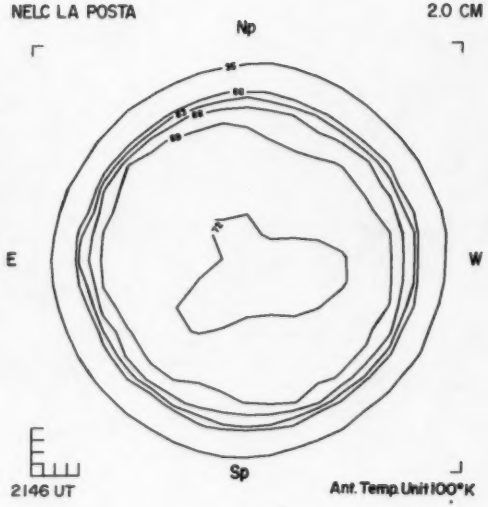
BOULDER



NO DATA

CORONA
KISLOVODSK

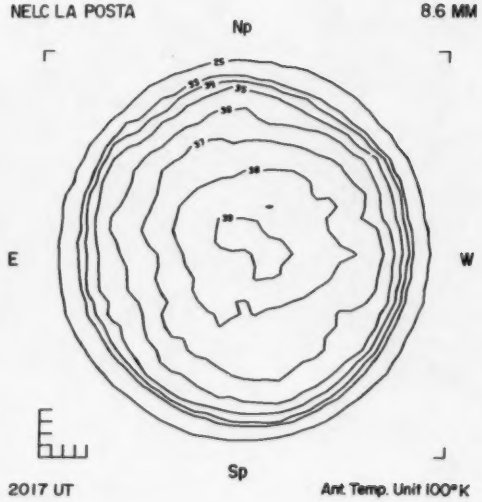
NELC LA POSTA



2146 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



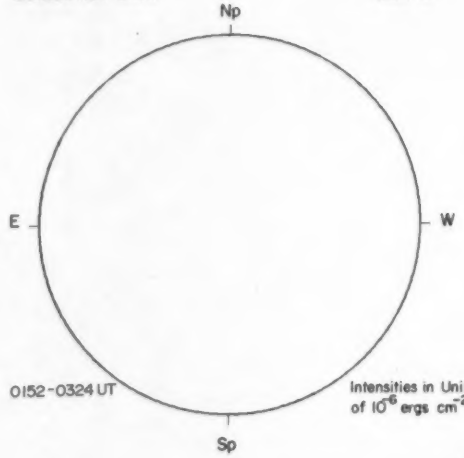
2017 UT

Ant. Temp. Unit 100°K

MAY 29, 1975 (P=-16.78, B_o=-1.06, L_o=134.22)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

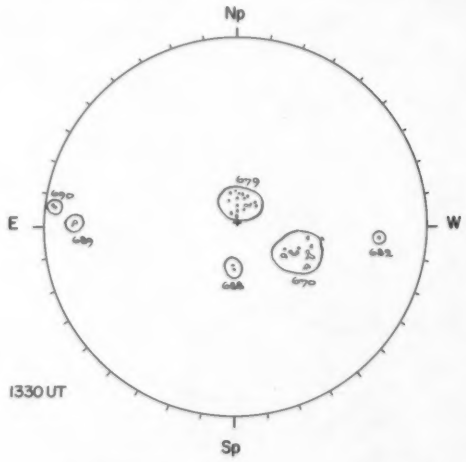


0152-0324 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

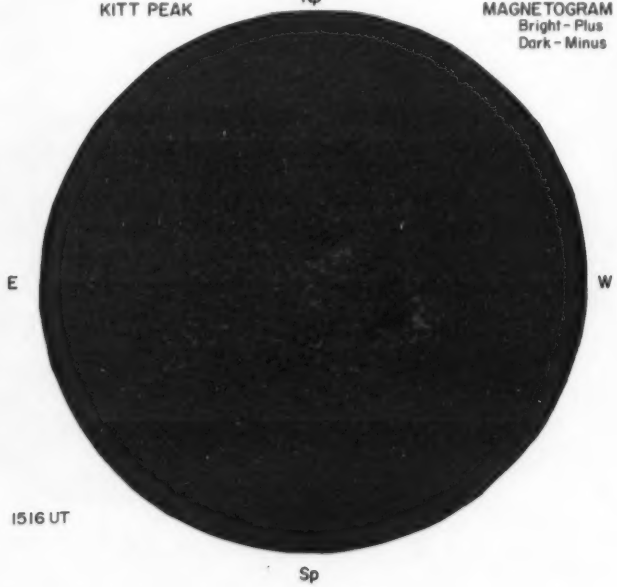
CALCIUM REPORT



FAIR | M

1330 UT

KITT PEAK



1516 UT

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTAY=
DELTAX=

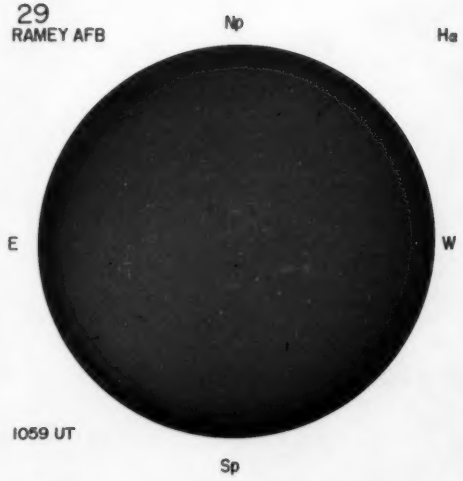
NO DATA

MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
±5
±10
±20
±40
±80

29

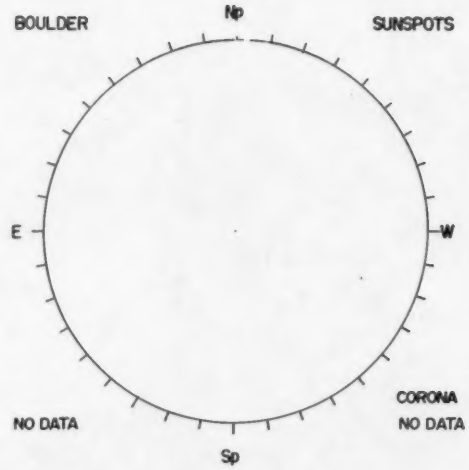
RAMEY AFB



1059 UT

BOULDER

SUNSPOTS



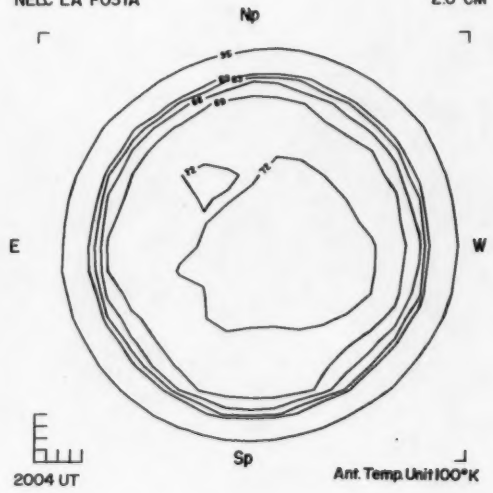
NO DATA

CORONA

NO DATA

NELC LA POSTA

2.0 CM

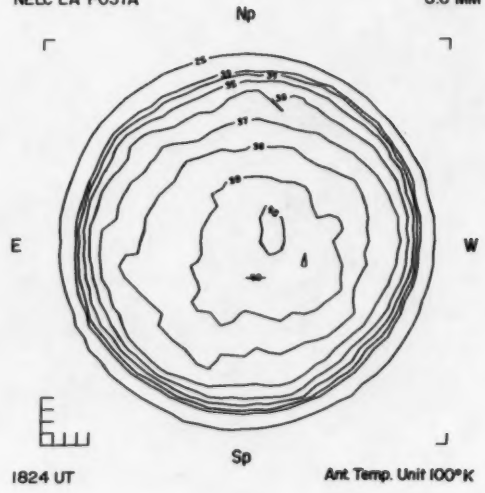


2004 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



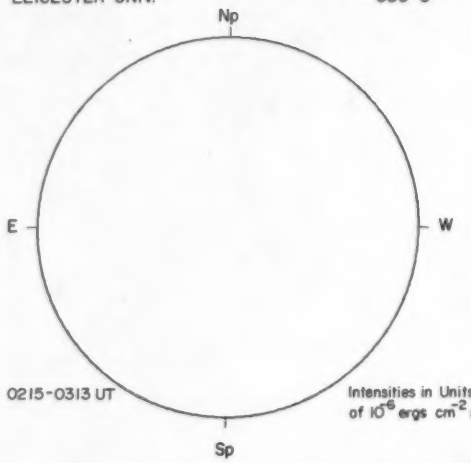
1824 UT

Ant. Temp. Unit 100°K

MAY 30, 1975 (P=-16.42, B_o=-0.94, L_o=120.99)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

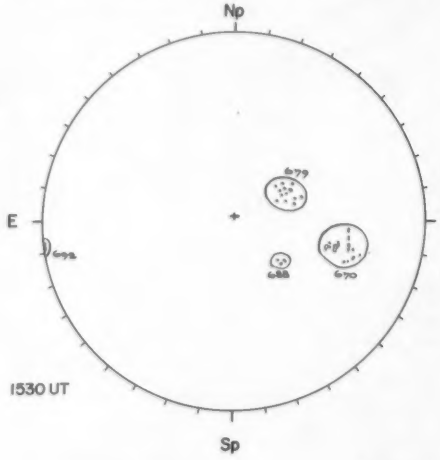


0215-0313 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

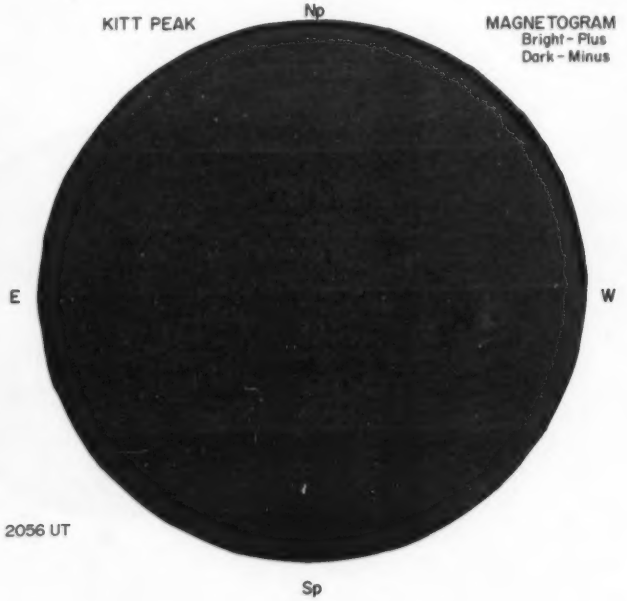
CALCULUM REPORT



FAIR M

1530 UT

KITT PEAK

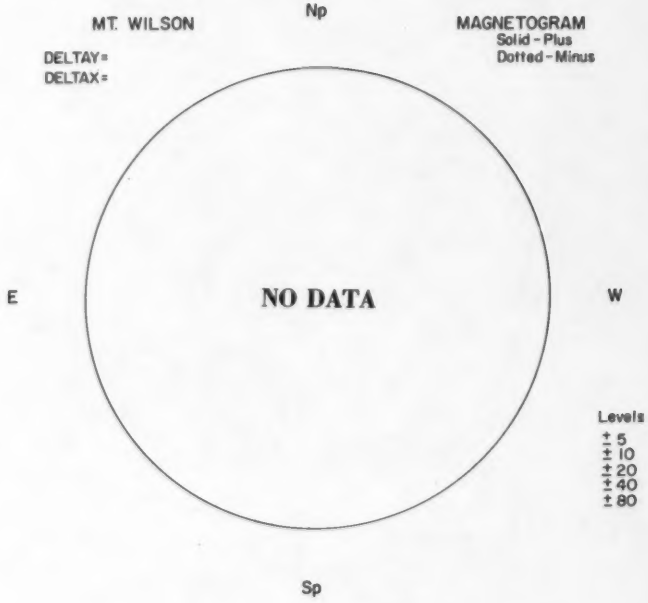


2056 UT

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

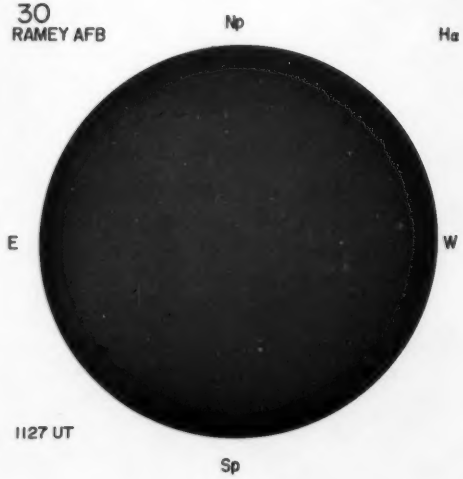
DELTAY=
DELTAX=



MAGNETOGRAM
Solid - Plus
Dotted - Minus

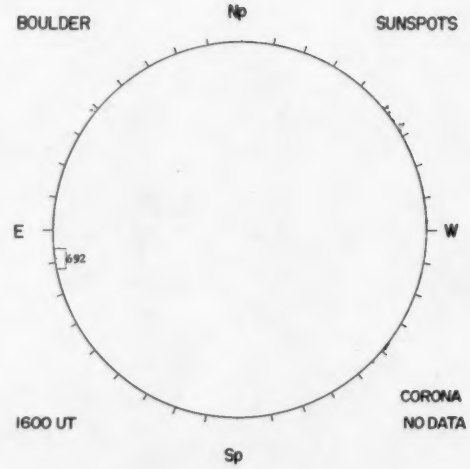
Levels
± 5
± 10
± 20
± 40
± 80

30
RAMEY AFB



1127 UT

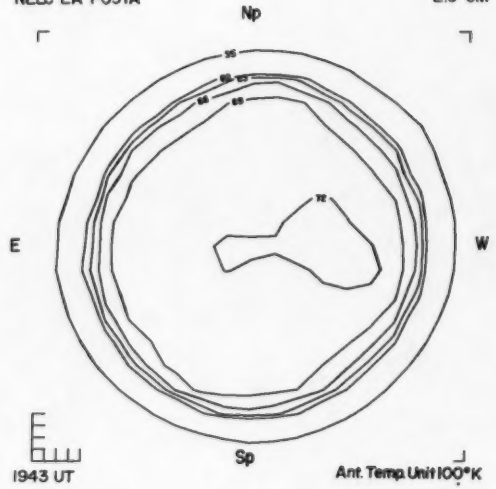
BOULDER



1600 UT

CORONA
NO DATA

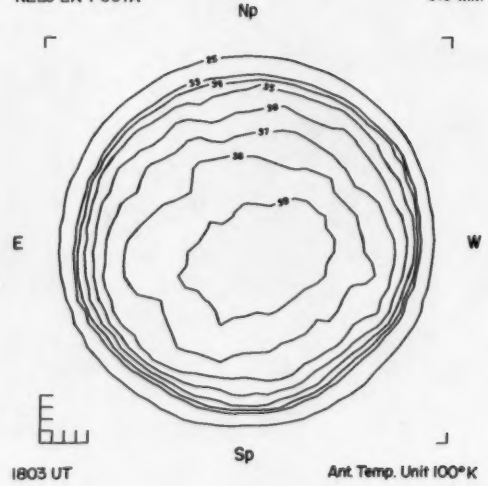
NELC LA POSTA



1943 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



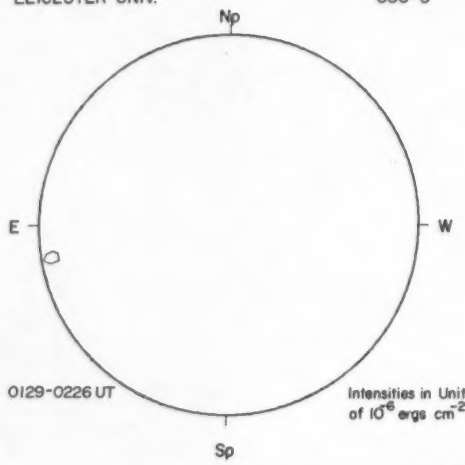
1803 UT

Ant. Temp. Unit 100°K

MAY 31, 1975 (P=-16.06, B_o=-0.82, L_o=107.75)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

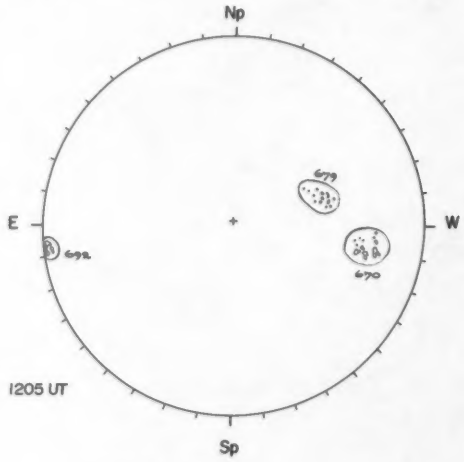


0129-0226 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

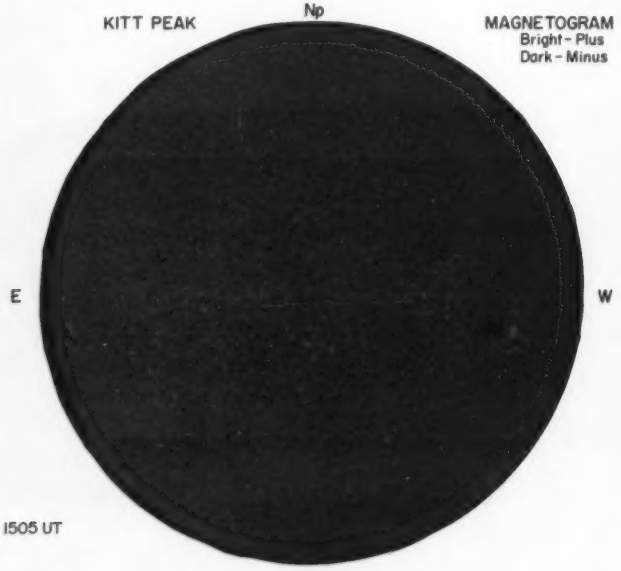


FAIR | M

1205 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus



1505 UT

MT. WILSON

DELTAY=
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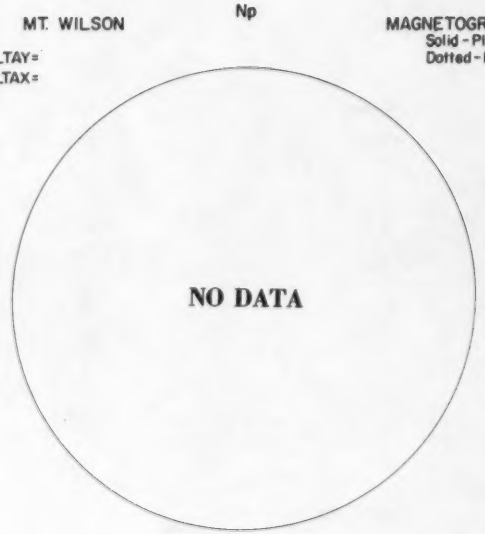
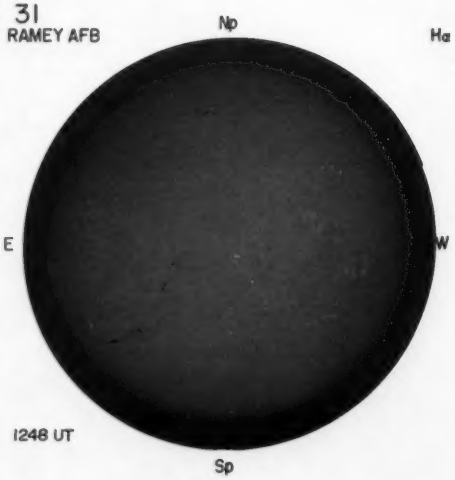


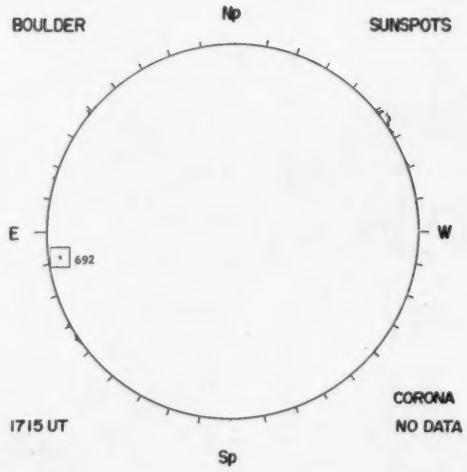
MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

31
RAMEY AFB



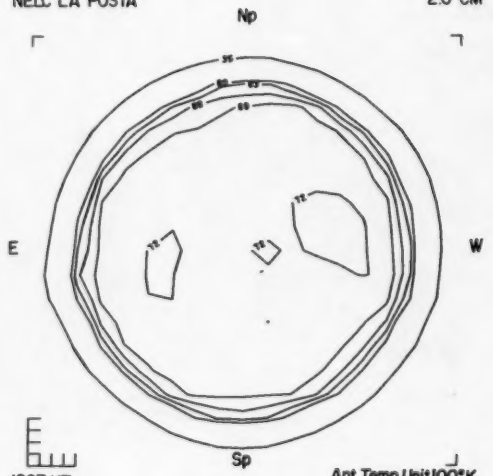
1248 UT



1715 UT

CORONA
NO DATA

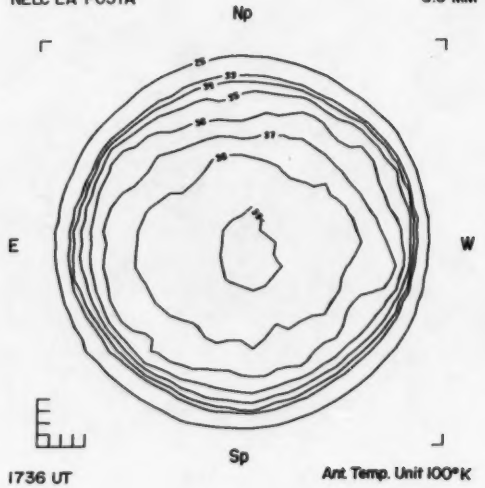
NELC LA POSTA



1927 UT

Ant. Temp. Unit 100°K

NELC LA POSTA



1736 UT

Ant. Temp. Unit 100°K

REGIONS OF SOLAR ACTIVITY

MAY 1975

MCMATH REGION 13635 CMP DATE 1.5

CALCIUM PLAGE DATA							SUNSPOT DATA							
YR MO DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75 5 1	13635	S08 W02	138	300	3.0	19568	S08 W04	140	(BP)	3	B	10	9	CRO
75 5 2	13635	S08 W14	138	600	3.5	19568	S08 W17	139	(B)	4	B	150	19	DSI
75 5 3	13635	S08 W28	139	900	2.5	19568	S08 W31	140	(BP)	5	B	260	10	DSI
75 5 4	13635	S08 W46	140	900	2.5	19568	S08 W48	140	(B)	4	B	270	17	DSO
75 5 5	13635	S08 W56	141	1100	3.0	19568	S08 W59	142	(B)	4	B	260	10	DSO
75 5 6	13635	S07 W69	141	900	2.5	19568	S08 W71	141	(B)	4	B	180	4	DSO
75 5 7	13635	S07 W84	142	700	2.0	19568	S08 W82	138		2	R	10	1	AXX

MCMATH REGION 13629 CMP DATE 2.8 RETURN OF REGION 13568 ROTATION 3

CALCIUM PLAGE DATA						SUNSPOT DATA							
YR MO DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75 4 26	13629	S15 E78	126	400	1.0									
75 4 27	13629	S14 E64	126	500	1.0									
75 4 29	13629	S14 E37	128	300	1.0									
75 4 30	13629	S14 E20	131	400	1.0									
75 5 1	13629	S14 E05	131	200	1.0									
75 5 2	13629	S14 W08	132	200	1.0									
75 5 3	13629	S14 W21	132	200	1.0									
75 5 4	13629	S13 W39	133	300	1.0									
75 5 5	13629	S13 W49	134	400	1.0									
75 5 6	13629	S13 W61	133	400	1.0									

MCMATH REGION 13628 CMP DATE 2.6

CALCIUM PLAGE DATA						SUNSPOT DATA							
YR MO DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75 4 26	13628	N02 E83	121	1200	3.5	19564	N03 E75	123	(BP)	3	B	20	4	BXI
75 4 27	13628	N02 E70	120	1200	3.0	19564	N01 E66	123	(BP)	2	B	40	7	CAO
75 4 28						19564	N01 E51	125	(BP)	2	B	10	1	AXX
75 4 29	13628	N03 E40	125	1200	3.0	19564	N02 E36	127	(AP)	1	B	10	1	AXX
75 4						19567	S02 E38	125	BF					
75 4 30	13628	N02 E26	125	1200	2.5	19564	N01 E24	126	(BP)	1	B	0	1	AXX
75 5 1	13628	N02 E13	123	1100	2.5	19567	S01 E13	123	(AP)	3	B	10	8	BXO
75 5 2	13628	N02 E00	124	900	2.0	19564	N03 W06	128						
75 5 3	13628	N02 W13	124	800	2.5	19564	N02 W16	125	(AP)	2	B	10	1	AXX
75 5 4	13628	N01 W30	124	700	2.5	19564	N02 W33	125	(AP)	1	B	0	5	AXX
75 5 5	13628	N01 W40	125	800	2.5									
75 5 6	13628	N01 W52	124	800	2.0	19564	N02 W55	125						
75 5 7	13628	N01 W69	127	500	1.5									
75 5 8	13628	N01 W84	129	200	1.0									

MCMATH REGION 13636 CMP DATE 3.4

CALCIUM PLAGE DATA						SUNSPOT DATA							
YR MO DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75 5 1	13636	S20 E23	113	600	1.0									

MCMATH REGION 13638 CMP DATE 4.8

CALCIUM PLAGE DATA						SUNSPOT DATA							
YR MO DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75 5 3	13638	N27 E17	94	100	1.0									

MCMATH REGION 13634 CMP DATE 5.4

CALCIUM PLAGE DATA						SUNSPOT DATA							
YR MO DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75 4 30	13634	S13 E63	88	300	2.0									
75 5 1	13634	S12 E53	83	600	3.0	19563	S10 E47	89	(BP)	2	B	20	9	BXO
75 5						19570	S12 E52	84	(B)	2	B	10	5	BXO
75 5 2	13634	S12 E40	84	800	2.5	19569	S10 E33	89	(B)	1	B	10	3	BXO
75 5						19570	S12 E38	84	(BP)	3	B	10	4	CSO

(Cont'd)

REGIONS OF SOLAR ACTIVITY

MAY 1975

(Cont'd)

75	5	3	13634	S12 E26	85	600	2.5	19569	S10 E18	91	(BP	3	B	20	6	CRI
75	5							19570	S12 E25	84	(BP)	2	B	10	5	BXO
75	5	4	13634	S11 E08	86	1000	2.5	19570	S13 E05	87	(AP)	2	B	20	7	BXO
75	5								S10 E04				B	10	7	BXO
75	5	5	13634	S11 W02	87	1200	3.0	19570	S12 W03	86	(BP	2	B	20	2	BXO
75	5	6	13634	S11 W14	86	1200	3.0	19570	S13 W18	88	(AP)	1				
75	5	7	13634	S11 W28	86	800	2.5	19573	S13 W31	87	AP		R	10	2	BXO
75	5								S12 W24				R	10	2	BXO
75	5	8	13634	S12 W42	87	700	2.0									
75	5	9	13634	S12 W56	87	500	1.5									
75	5	10	13634	S12 W68	87	400	1.5									
75	5	11	13634	S10 W78	84	400	1.0									

MCMATH REGION 13639 CMP DATE 7.2

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
75	5	4	13639	N14 E32	62	200	1.5
75	5	5	13639	N14 E22	63	200	1.5

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS

MCMATH REGION 13637 CMP DATE 7.3 RETURN OF REGION 13584 ROTATION 2

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
75	5	1	13637	N04 E80	56	100	2.5
75	5	2	13637	N03 E63	61	100	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS

MCMATH REGION 13640 CMP DATE 7.4

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
75	5	4	13640	S20 E36	58	100	1.5
75	5	5	13640	S20 E26	59	200	1.5
75	5	6	13640	S20 E12	60	200	1.5
75	5	7	13640	S19 W02	60	200	1.0
75	5	8	13640	S20 W14	59	200	1.0
75	5	9	13640	S19 W28	59	200	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS

MCMATH REGION 13641 CMP DATE 7.8

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
75	5	6	13641	S14 E16	56	200	1.5
75	5	7	13641	S13 E04	54	100	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS

MCMATH REGION 13648 CMP DATE 9.1

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
75	5	11	13648	N21 W32	38	200	1.5
75	5	13	13648	N21 W58	38	200	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS

MCMATH REGION 13642 CMP DATE 9.3

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
75	5	8	13642	S05 E10	35	100	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS

MCMATH REGION 13643 CMP DATE 9.9

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
75	5	8	13643	S02 E19	26	100	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS

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MCMATH REGION 13645 CMP DATE 11.3

CALCIUM PLAGE DATA							SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	9	13645	S08 E23	8	100	1.5									

MCMATH REGION 13644 CMP DATE 12.1

CALCIUM PLAGE DATA							SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	8	13644	N05 E47	359	100	1.0									

MCMATH REGION 13651 CMP DATE 14.8

CALCIUM PLAGE DATA							SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	14	13651	N33 E03	324	100	1.5									

MCMATH REGION 13657 CMP DATE 15.1

CALCIUM PLAGE DATA							SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	19	13657	S25 W58	319	100	1.0									

MCMATH REGION 13659 CMP DATE 15.3

CALCIUM PLAGE DATA							SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	20	13659	S50 W70	317	200	1.0									

MCMATH REGION 13646 CMP DATE 16.2

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	9	13646	S05 E84	308	400	1.5									
75	5	10	13646	S05 E77	303	1200	2.5	19571	S06 E75	303	(AP)	1	6	0	2	BXO
75	5	11	13646	S06 E63	304	1300	2.5	19571	S06 E62	302	AP					
75	5	12						19571	S06 E50	301						
75	5	13	13646	S06 E36	304	1000	2.5									
75	5	14	13646	S06 E23	304	700	2.0									
75	5	15	13646	S06 E09	304	700	2.0									
75	5	16	13646	S06 W07	304	600	2.0									
75	5	17	13646	S06 W19	306	700	2.0									
75	5	18	13646	S06 W32	306	700	2.5									
75	5	19	13646	S06 W45	306	700	2.5									
75	5	20	13646	S06 W59	306	800	2.5									
75	5	21	13646	S06 W74	307	800	2.0									
75	5	22	13646	S06 W88	307	200	1.0									

MCMATH REGION 13655 CMP DATE 16.4

CALCIUM PLAGE DATA							SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	18	13655	N09 W28	302	100	1.0									
75	5	19	13655	N09 W42	303	100	1.0									

MCMATH REGION 13649 CMP DATE 17.0 RETURN OF REGION 13619 ROTATION 2

CALCIUM PLAGE DATA							SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	11	13649	N03 E73	294	100	1.0									

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MAY 1975

MCMATH REGION 13650 CMP DATE 17.3

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	13	13650	S23 E50	290	100	1.5							

MCMATH REGION 13672 CMP DATE 17.3

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	22	13672	N11 W71	290	100	1.5							

MCMATH REGION 13660 CMP DATE 17.7

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	20	13660	S16 W38	285	100	1.0							
75	5	21	13660	S16 W50	283	100	1.0							

MCMATH REGION 13652 CMP DATE 18.0

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	15	13652	N04 E33	280	200	2.0							
75	5	16	13652	N04 E17	280	200	1.0							
75	5	17	13652	N04 E06	281	200	1.5							
75	5	18	13652	N04 W07	281	300	2.0							
75	5	19	13652	N04 W22	283	200	2.5							
75	5	20	13652	N04 W35	282	200	2.5							
75	5	21	13652	N05 W50	283	100	1.5							

MCMATH REGION 13656 CMP DATE 19.3

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	18	13656	S06 E10	264	100	1.5							
75	5	19	13656	S08 W03	264	100	1.0							

MCMATH REGION 13676 CMP DATE 19.9

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	23	13676	S10 W48	255	100	1.0							

MCMATH REGION 13653 CMP DATE 20.0

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	15	13653	N07 E59	254	100	1.0							

MCMATH REGION 13673 CMP DATE 20.8

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	22	13673	S30 W25	244	100	1.0							
75	5	23	13673	S30 W36	243	100	1.0							

REGIONS OF SOLAR ACTIVITY

MAY 1975

MCMATH REGION 13666 CMP DATE 21.5

				CALCIUM PLAGE DATA					SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT		MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	5	20	13666	N14 E12	235	200	1.5									

MCMATH REGION 13665 CMP DATE 21.6

				CALCIUM PLAGE DATA					SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT		MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	5	20	13665	N26 E13	234	100	1.5									
75	5	21	13665	N26 W01	234	100	1.5									

MCMATH REGION 13674 CMP DATE 21.6

				CALCIUM PLAGE DATA					SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT		MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	5	21	13674	N09 E00	233	100	1.0									
75	5	22	13674	N10 W14	233	100	1.0									

MCMATH REGION 13686 CMP DATE 21.6

				CALCIUM PLAGE DATA					SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT		MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	5	27	13686	N09 W78	233	300	1.0									

MCMATH REGION 13680 CMP DATE 21.9

				CALCIUM PLAGE DATA					SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT		MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	5	24	13680	N25 W36	230	100	1.0									

MCMATH REGION 13684 CMP DATE 22.0

				CALCIUM PLAGE DATA					SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT		MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	5	26	13684	S10 W60	228	100	1.0									

MCMATH REGION 13654 CMP DATE 22.1

				CALCIUM PLAGE DATA					SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT		MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	5	17	13654	N45 E60	227	100	1.0									
75	5	18	13654	N45 E47	227	100	1.0									
75	5	19	13654	N45 E34	227	100	1.5									

MCMATH REGION 13681 CMP DATE 23.1

				CALCIUM PLAGE DATA					SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT		MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	5	24	13681	S16 W19	213	100	1.0									
75	5	25	13681	S16 W32	213	100	1.0									

MCMATH REGION 13687 CMP DATE 23.6

				CALCIUM PLAGE DATA					SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT		MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	5	26	13687	N11 W65	206	100	2.0									

REGIONS OF SOLAR ACTIVITY

MAY 1975

MCMATH REGION 13678 CMP DATE 24.1

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	23	13678	N05 E08	199	100	1.0									

MCMATH REGION 13675 CMP DATE 24.9

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	22	13675	S09 E30	189	300	2.5	19572	S10 E28	191	(AP)	3	R	10	1	HRX
75	5	23	13675	S09 E16	189	200	2.0	19572	S10 E15	191	(BP	4	B	10	2	BXO
75	5	24	13675	S09 E04	190	200	2.0	19572	S09 E01	192	(AP)	2	B	20	3	BXI
75	5	25	13675	S09 W10	191	200	1.5									
75	5	26	13675	S09 W23	191	200	1.0									
75	5	27	13675	S09 W36	191	200	1.0									

MCMATH REGION 13669 CMP DATE 25.1

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	20	13669	S10 E60	187	100	2.5									

MCMATH REGION 13685 CMP DATE 25.3

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	26	13685	S47 W16	184	100	1.0									

MCMATH REGION 13682 CMP DATE 25.8

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	26	13682	S03 W09	177	100	1.5									
75	5	27	13682	S03 W22	177	200	2.0	19573	S04 W26	179	A		B	10	1	AXX
75	5	28	13682	S03 W36	177	100	1.0									
75	5	29	13682	S03 W49	177	100	1.0									

MCMATH REGION 13671 CMP DATE 28.0

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	21	13671	N19 E89	144	200	1.5									
75	5	22	13671	N19 E71	148	100	1.5									

MCMATH REGION 13670 CMP DATE 28.1 RETURN OF REGION 13635 ROTATION 2

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	21	13670	S09 E89	144	200	2.0									
75	5	22	13670	S09 E74	145	700	2.0									
75	5	23	13670	S09 E62	145	700	2.0									
75	5	24	13670	S10 E47	147	700	2.0									
75	5	25	13670	S10 E34	147	700	2.0									
75	5	26	13670	S10 E21	147	600	2.0									
75	5	27	13670	S10 E08	147	600	2.0									
75	5	28	13670	S10 W07	148	600	2.0									
75	5	29	13670	S10 W20	148	600	2.0									
75	5	30	13670	S10 W34	148	600	2.0									
75	5	31	13670	S09 W46	148	500	2.0									
75	6	01	13670	S09 W60		500	2.0									
75	6	02	13670	S09 W73		500	2.0									
75	6	03	13670	S08 W88		200	1.0									

REGIONS OF SOLAR ACTIVITY

MAY 1975

MCMATH REGION 13696 CMP DATE 28.1

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	6	02	13696	N13 W70		100	2.0							

MCMATH REGION 13693 CMP DATE 28.7

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	6	01	13693	N02 W49		100	1.0							

MCMATH REGION 13679 CMP DATE 29.4 RETURN OF REGION 13628 ROTATION 2

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	23	13679	N07 E82	125	200	2.0							
75	5	24	13679	N06 E67	127	300	2.0							
75	5	25	13679	N06 E54	127	300	2.0							
75	5	26	13679	N07 E40	128	400	2.0							
75	5	27	13679	N07 E26	129	400	2.0							
75	5	28	13679	N07 E11	130	400	2.0							
75	5	29	13679	N07 W02	130	300	1.5							
75	5	30	13679	N07 W15	129	300	1.5	19574	N17 W07	117		BP		
75	5	31	13679	N07 W26	128	300	1.0							
75	6	01	13679	N07 W40		300	1.5							
75	6	02	13679	N08 W57		400	1.5							
75	6	03	13679	N08 W71		300	1.0							

MCMATH REGION 13688 CMP DATE 29.6

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	28	13688	S14 E15	126	200	2.0							
75	5	29	13688	S14 E01	127	100	1.5							
75	5	30	13688	S14 W14	128	100	1.0							

MCMATH REGION 13694 CMP DATE 30.6

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	6	31	13694	N06 W25		100	1.0							

MCMATH REGION 13683 CMP DATE 31.4

				CALCIUM PLAGE DATA				SUNSPOT DATA						
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT CLASS
75	5	26	13683	S08 E65	103	100	1.0							

No calcium spectroheliograms were secured at the McMath-Hulbert Observatory on May 12, 1975.
No sunspot observations were made at Mt. Wilson Observatory on May 20, 1975.

DAILY CALCIUM PLAGE INDEX

MAY 1975

YR	MO	DAY	INDEX	YR	MO	DAY	INDEX	YR	MO	DAY	INDEX
75	5	1	6.7	75	5	11	1.7	75	5	21	0.8
75	5	2	5.7	75	5	12	*	75	5	22	1.2
75	5	3	6.0	75	5	13	2.2	75	5	23	1.3
75	5	4	5.0	75	5	14	1.4	75	5	24	1.7
75	5	5	7.6	75	5	15	1.8	75	5	25	1.8
75	5	6	5.9	75	5	16	1.4	75	5	26	2.2
75	5	7	2.4	75	5	17	1.6	75	5	27	2.5
75	5	8	1.5	75	5	18	2.3	75	5	28	2.5
75	5	9	0.7	75	5	19	2.0	75	5	29	1.9
75	5	10	0.8	75	5	20	2.0	75	5	30	1.5
								75	5	31	1.3

* NO OBSERVATIONS

SUDDEN IONOSPHERIC DISTURBANCES

MAY 1975

DAY	UNIVERSAL TIME				WIDE SPREAD INDEX	NUMBER OF STATION REPORTS BY TYPE							KNOWN FLARE	McMATH REGION
	START	END	MAX	IMP		SWF	SCNA	SEA	SPA	LF-SPA	SES	SFD		
08	0243	0317	0246	1-	3				1			1	0242	13634

PERIODS OF NO OBSERVATIONS:

DATE	TIME (UT) and STATION	DATE	TIME (UT) and STATION
01-08	0000-2400 A28	14-31	0000-2400 A36
03	0000-2400 TN	16-17	0000-2400 A28
04	1400-2400 MC, 0000-2400 A36	21	1200-1212 MC
05-07	0000-2400 A34	27	0000-2400 TN
05	0000-1334 MC, 0000-2400 A36	27-29	0000-2400 A26
06	0000-2400 TN	29	0300-0642 TM
08	2225-2400 TM	30	2141-2400 MC
09	0000-0422 TM	31	0000-0118 MC

STATIONS REPORTING FOR MAY 1975

AAVSO (A31) (SWF) (A 1, A26, A31) (SEA) (A1,
A4, A19, A21, A28, A29, A30, A31,
A32, A34, A35, A36, A37, A38) (SES)
DARMSTADT (DA) (SWF)
DEBRE ZEIT (DE) (SPA)
HAWAII (HA) (SFD)
HERMANUS (HS) (SEA)
HERSTMONCEUX (HC) (SEA)
HIRAISO (HI) (SWF)
HOBART (TA) (SEA)
HUANCAYO (HU) (SWF)
INUBO (IN) (SPA)
KULA (KL) (SPA)
MCMATH (MC) (SWF, SCNA)
PANSKA VES (SWF, SEA, SES)
POITIERS (PO) (SEA)
PRESTON (LO) (SEA)
SOFIA (SF) (SES)
ST CLOUD (SC) (SES)
TABLE MOUNTAIN (TM) (SPA, LF-SPA)
TORINO (TN) (SPA)
UPICE (UI) (SEA)

SIDS BY McMATH REGION

MAY 1975

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
DAY																															
REGION																															
34								1																							
X-RAY																															
UNKNOWN																															
NO FP																															

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION		STATION	EVENTS													SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.		
01	0000	0729	CULG														
	0000	0200	BOUL														
	0000	1010	MANI														
	0446	1302	WEIS														
	0543	1818	DURN														
	1200	1500	BOUL														
	0943	2338	SGMR										1855.4	1855.6	2		III
	2030	2400	CULG							2042	2400	1					IS
			CULG				2059		1	2050		2					IIIB,U
			CULG							2050	2055						IIIGG,W
			CULG							2124		1					IIIB
			CULG							2154	2250						IIIN,W
	1246	2246	HARV							2155	2157	1					IIIG
			CULG							2211.5	2212.5	2					IIIG,U
			HARV							2212	2213	1					IIIGG
			SGMR										2212.8	2212.3	2		III
	1800	2400	BOUL										2212.8	2212.7	1		III
			CULG							2231.5		1					IIIB,U
			CULG							2245.5		1					IIIB,U
02	0000	0729	CULG							0000	0245						IS,W
	0000	0200	BOUL														
	0300	1010	MANI														
			CULG				0358	0355	1								FAST DRIFT
			CULG				0444	0535		0059	0255						IIIN,W
	0451	1033	DURN							0459.8	0500.5	2					IIIG
			CULG				0521		1	0521							FAST DRIFT
			DURN				0521.3	0521.4	2	0521.3	0521.4	2					IIIG
			DURN				0533.7	0533.8	2	0533.7	0533.8	2					IIIG
			CULG							0554	0720	1					I
	0625	1808	WEIS														
			DURN				0900	1033 D	1	0900	1033 D	1					I,N
	1150	2340	SGMR														
	1200	2400	BOUL														
	1127	1821	DURN				1416	1821 D	2	1505	1821 D	2					I,DC
	1245	2246	HARV							1518	1748	1					IN
	2029	2400	CULG				2036	2400		2036	2400	1					IS
			CULG							2054	2400	1					IIIN
	2136	2400	MANI														
03	0000	1010	MANI														
	0000	0200	BOUL														
	0000	0729	CULG				0000	0720	1	0000	0530	1					IS
	0448	1227	DURN				0448 E	1227 D	3	0448 E	1227 D	3					I
	1246	2301	HARV							1250	1528	1					IN
	0450	1319	WEIS							1502	1702	1					IS
			HARV							1942	1944	3					IIIGG
	2030	2400	CULG				2035	2400	1								IS
	2136	2400	MANI														
			CULG				2151			2151		1					IIIB
			CULG				2158	2200.5	2	2158	2200.5	2	2158.5				IIIGG,U,V
			HARV							2158	2200	3	2158	2159	3		IIIGG
	0940	2341	SGMR										2158.5	2159.4	2		III
			BOUL							2158.5	2200.0	1	2158.5	2200.0	1		IIIG
			CULG							2230	2400	1					IS
			HARV							2235	2301	1					I
			CULG				2345.5	2346	2	2345.5	2346	2					IIIG,U
			BOUL							2345.8	2346.0	1					III
04	0000	1010	MANI														
			CULG							0000	0523	1					IS
	0000	0728	CULG				0000	0710		0000	0651						IIIN,W
			CULG				0021.5	0022		0021.5	0022						IIIG
			CULG							0235	0236						IIIB,U
			CULG				0238.5	0241	2	0238.5	0241	2	0239	0240	2		IIIGG,U,V
			CULG							0244		2					IIIB,U
			CULG							0246.5	0247.5	2					IIIG
	0450	1611	WEIS							0450	1005	2					IN,DC
			CULG				0532	0539	1	0532	0539	2					IIIG,U
	0448	1445	DURN				0532.2	0532.5	3								IIIG,U
			WEIS							0532.3	0532.5	1					IIIG
			WEIS							0536.3	0537.4	2					IIIG
			DURN				0536.5	0538.3	3	0536.5	0538.3	3					IIIG
			WEIS							0538.3	0538.4	2					IIIB
			WEIS							0543.9	0544.5	1					IIIG
			CULG				0544	0544.5	1	0544	0544.5	2					IIIG,U
			CULG				0642	0643	1								FAST DRIFT
			DURN				0642.2	0642.8	3								IIIG
			DURN				0820	1140	3								I
			DURN							1306.4	1307.0	3					IIIG
			WEIS							1306.7	1307.3	2					IIIG
	1246	2246	HARV							1307		2					IIIG
	1455	1620	DURN														
			HARV							1759	1800	3					IIIG,U
			WEIS							1759.8	1800.0	2					IIIG
	0939	2342	SGMR										1759.9	1800.3	1		III
			SGMR										1801.9	1802.2	1		III
			WEIS							1801.9	1802.1	2					IIIG
			HARV							1802	1803	3					IIIG
			HARV							1911	2246	1					I

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION		STATION	EVENTS													SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.		
04			SGMR										1913.2	1913.6	1		III
	2030	2400	CULG				2030	2400	1	2030	2400	1					IS
	2136	2400	MANI														
05	0000	1010	MANI														
	0000	0729	CULG				0000	0729	1	0000	0729	1					IS
			CULG							0326	0327	1					IIIG
	0450	0623	WEIS							0553.5	0639.0	1					IS
	0701	1813	WEIS							0701.0	1735.0	1					IN
	0448	1825	DURN				0910	1825 D	2	0920	1825 D	2					I,DC
	0939	2343	SGMR														
	1246	2246	HARV							1246	1623	1					I
			WEIS							1352.4	1353.4	1					IIIG
			HARV							1728	1900	1					IN
			HARV							1900	2208	1					I
	1200	2400	BOUL							1912	2400	1					IS
			BOUL										1943.5	1947.2	1		III
	2029	2400	CULG				2029	2400	1	2029	2400	1					IS
			CULG							2029	2400						IIIN,W
	2136	2400	MANI														
			CULG							2315	2316	1	2315.5	2316			IIIG
			BOUL							2315.0	2316.0	1	2315.0	2316.0	1		III
06	0000	0200	BOUL							0808	0130	1					IS
	0000	1010	MANI														
			CULG							0000	0533						IIIN,W
	0000	0729	CULG				0000	0420	1	0000	0615	1					IS
			BOUL										0013.7	0014.3	1		III
	0936	2344	SGMR														
	0430	1252	WEIS							1103.5	1252.0	1					IN
	1200	2400	BOUL														
	0445	1825	DURN				1205	1825 D	1	0943	1825 D	1					I,W
	1246	2251	HARV														
	1256	1816	WEIS							1648.0	1731.8	1					IN
	2029	2400	CULG				2029	2155		2029	2157						IS,W
	2135	2400	MANI														
07	0000	1010	MANI														
	0000	0200	BOUL														
	0444	1828	DURN														
	0458	1817	WEIS														
	0000	0729	CULG							0632	0633						IIIG
	0935	2345	SGMR														
	1200	2400	BOUL														
	1245	2246	HARV														
	2029	2237	CULG														
	2135	2400	MANI														
08	0000	1011	MANI														
	0000	0200	BOUL														
	0444	0532	DURN														
	0542	1829	DURN														
	0934	2346	SGMR														
	1247	1648	HARV														
	1400	1600	BOUL														
	1645	2246	HARV														
	1900	2400	BOUL														
	2029	2400	CULG														
	2134	2400	MANI														
09	0000	1011	MANI														
	0000	0200	BOUL														
	0000	0728	CULG														
	0443	1830	DURN														
	0656	1823	WEIS														
	0933	2347	SGMR														
	1200	1900	BOUL														
	1246	2246	HARV														
	2028	2400	CULG														
	2133	2400	MANI														
	2208	2400	BOUL														
10	0000	0200	BOUL														
	0000	1010	MANI														
	0000	0728	CULG														
	0932	2348	SGMR														
	0427	1245	WEIS							0937.0	0937.7	1					IIIG
	0442	1830	DURN							0937.4	0937.6	2					IIIG
	1246	2245	HARV														
	1324	1825	WEIS														
	2029	2400	CULG														
	2133	2400	MANI														
	2300	2400	BOUL														
11	0000	0200	BOUL														
	0000	1010	MANI														
	0000	0728	CULG														
	0430	1827	WEIS														
	0442	1822	DURN														
	0930	2349	SGMR														

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION		STATION	EVENTS													SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.		
11	1246	2246	HARV														
	1300	2400	BOUL														
	2028	2400	CULG														
	2132	2400	MANI														
12	0000	1010	MANI														
	0000	0200	BOUL														
	0000	0726	CULG														
	0438	0526	WEIS														
	0442	1834	DURN														
	0650	1824	WEIS														
	0929	2350	SGMR														
	1130	2400	BOUL														
	1245	2246	HARV														
	2028	2400	CULG														
	2132	2400	MANI														
13	0000	1010	MANI														
	0000	0200	BOUL														
	0000	0726	CULG														
	0439	1834	DURN														
	0926	2351	SGMR														
	1130	2400	BOUL														
	1246	2246	HARV														
	2028	2400	CULG														
	2132	2400	MANI														
14	0000	1010	MANI														
	0000	0200	BOUL														
	0000	0723	CULG														
	0436	1836	DURN														
	1130	2400	BOUL														
	1246	2246	HARV														
	0927	2353	SGMR										1446.8	1446.3	1		III
	2029	2400	CULG														
	2132	2400	MANI														
15	0000	1010	MANI														
	0000	0230	BOUL														
	0000	0728	CULG														
	0437	1720	DURN														
	0926	2354	SGMR														
	1130	2400	BOUL														
	1246	2246	HARV														
	1556	1828	WEIS														
	1836	1836	DURN														
	2028	2400	CULG														
	2132	2400	MANI														
16	0000	1010	MANI														
	0000	0230	BOUL														
	0000	0726	CULG							0139							IIIB,W
	0412	0705	WEIS														
	0436	1636	DURN														
	0740	1130	WEIS														
	0923	2355	SGMR														
	1130	1400	BOUL														
	1135	1645	WEIS														
	1246	2245	HARV														
	2028	2400	CULG														
	2131	2400	MANI														
	2200	2400	BOUL														
17	0000	0230	BOUL														
	0000	1010	MANI														
	0000	0728	CULG														
	0436	1836	DURN														
	0924	2356	SGMR														
	1130	2400	BOUL														
	1246	2251	HARV														
	2028	2400	CULG							2130							IIIB,W
	2130	2400	MANI														
18	0000	1010	MANI														
	0000	0230	BOUL														
	0000	0726	CULG														
	0435	1836	DURN														
	0923	2357	SGMR														
	1130	2400	BOUL														
	1246	2256	HARV														
	2028	2400	CULG														
	2130	2400	MANI														
19	0000	1008	MANI														
	0000	0230	BOUL														
	0000	0728	CULG														
	0435	1308	DURN														
	0922	2358	SGMR														
	1130	2400	BOUL														
	1245	2246	HARV														

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
19	1318	1636	DURN													
	2026	2117	CULG													
	2129	2400	MANI													
	2205	2400	CULG													
20	0000	1006	MANI													
	0000	0230	BOUL													
	0000	0728	CULG							0506						IIIB
	0435	1636	DURN				1151.4	1151.5	1	1151.4	1151.5	2				III
	0706	0756	WEIS							1154.3	1155.7	2				IIIG
	0921	2359	SGMR										1154.4	1155.8	2	IIIG
	1130	2400	BOUL										1154.6	1156.0	2	IIIG
	1035	1355	WEIS							1156.6	1156.7	1				IIIB
	1247	2246	HARV													
	1528	1801	WEIS													
	2029	2400	CULG													
	2129	2400	MANI													
21	0000	1006	MANI													
	0000	0230	BOUL													
	0000	0728	CULG													
	0405	1130	WEIS													
	0643	1837	DURN													
	0920	2400	SGMR													
	1130	2400	BOUL													
	1140	1845	WEIS													
	1240	2246	HARV													
	2028	2400	CULG													
	2129	2400	MANI													
22	0000	1006	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0415	1635	WEIS													
	0434	1837	DURN													
	0920	2401	SGMR													
	1130	2400	BOUL													
	1245	2311	HARV													
	2029	2400	CULG													
	2128	2400	MANI													
23	0000	1006	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0434	1837	DURN													
	0745	1847	WEIS													
	0919	2402	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	2029	2400	CULG													
	2128	2400	MANI													
24	0000	0601	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0405	1136	WEIS													
	0433	1837	DURN													
	0750	1006	MANI													
	0918	2402	SGMR													
	1130	2400	BOUL													
	1140	1546	WEIS													
	1246	2246	HARV													
	2029	2400	CULG													
	2128	2400	MANI													
25	0000	1006	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0400	1657	WEIS													
	0433	1837	DURN													
	0917	2403	SGMR													
	1130	2400	BOUL													
	1245	2246	HARV													
	2029	2400	CULG													
	2128	2400	MANI													
26	0000	1006	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0432	0618	DURN													
	0626	1837	DURN													
	0724	1851	WEIS													
	0917	2404	SGMR													
	1246	2124	HARV													
	1400	2400	BOUL													
	2029	2400	CULG													
	2126	2400	MANI													
	2217	2246	HARV													
27	0000	0729	CULG													

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
27	0000	1008	MANI													
	0000	0230	BOUL													
	0404	0700	WEIS													
	0432	0920	OURN													
	0915	1237	WEIS													
	0916	2405	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	1250	1849	WEIS													
	2029	2408	CULG													
	2129	2400	MANI													
28	0000	1008	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0355	1617	WEIS													
	0915	2406	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	1630	1850	WEIS													
	2029	2400	CULG													
	2129	2400	MANI													
29	0000	1011	MANI													
	0000	0230	BOUL													
	0000	0729	CULG							0343		1				IIIB
	0355	1340	WEIS													
	0548	1345	OURN													
	0915	2407	SGMR													
	1130	2408	BOUL													
	1245	2245	HARV													
	1345	1425	WEIS													
	2030	2408	CULG													
	2129	2400	MANI													
30	0000	0710	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0645	1037	OURN													
	0705	1048	WEIS													
	0743	1011	MANI													
	0914	2408	SGMR													
	1100	1854	WEIS													
	1130	2408	BOUL													
	1246	2245	HARV													
	2030	2400	CULG													
	2129	2400	MANI													
31	0000	0822	MANI													
	0000	0230	BOUL													
	0000	0730	CULG													
	0350	1546	WEIS													
	0430	1837	OURN													
	0903	1011	MANI													
	0914	2408	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	2030	2400	CULG													
	2129	2409	MANI													

The symbols used in connection with the spectral type in describing the important bursts are as follows:

B = Single burst
G = Small group (< 10) of bursts
GS = Large group (> 10) of bursts
C = Underlying continuum (particularly with type I)
S = Storm in the sense of intermittent but apparently connected activity
N = Intermittent activity in this period
U = U-shaped burst of Type III
RS = Reverse slope burst
DP = Drifting pairs
DC = Drifting Chains
H = Herringbone
W = Weak
P = Pulsations
CONT = Continuum
UNCLF = Unclassified activity

SELECTED SOLAR EVENTS
MAY 1975

Culgoora

UT Date 1975. MAY	HELIOGRAPH EVENT							Spectral Type	REMARKS
	Start (UT)	End (UT)	Freq. (MHz)	Positions		Polarization	Intensity (1-3)		
				Central Dist. ($R_\odot$)	Position Angle (Deg.)				
1-2	2300	0500	160	0	-	L	2	I	This type I storm persisted until west limb passage on May 7
2	0411	0412	80	0	-	0	2	IIIB	
4	0238	0241	(160	0.8	230	0	2)	IIIGG,U,V	
			(80	1.0	240	0	3)		
			(43.25	1.5	260	-	3)		
	0246	0248	(160	0.8	230	0	1)	IIIG	
			(80	1.0	240	0	2)		
5	0326	0328	80	1.1	250	0	3	IIIG	

Days without Heliograph observations: ....Daily observations.....

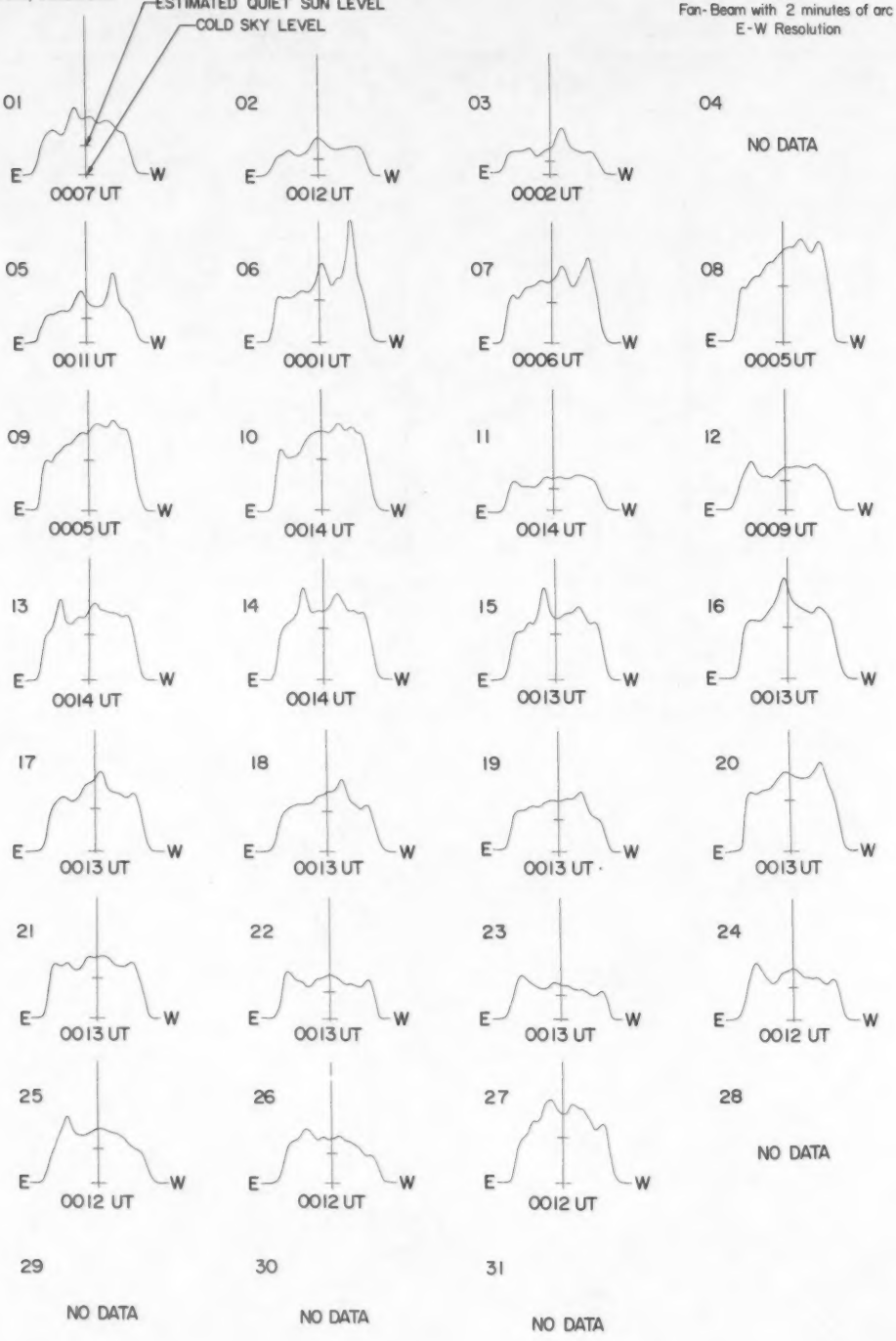
EAST-WEST SOLAR SCANS

MAY 1975

Fleurs, Australia

ESTIMATED QUIET SUN LEVEL
COLD SKY LEVEL

21 cm
Fan-Beam with 2 minutes of arc
E-W Resolution



EAST-WEST SOLAR SCANS

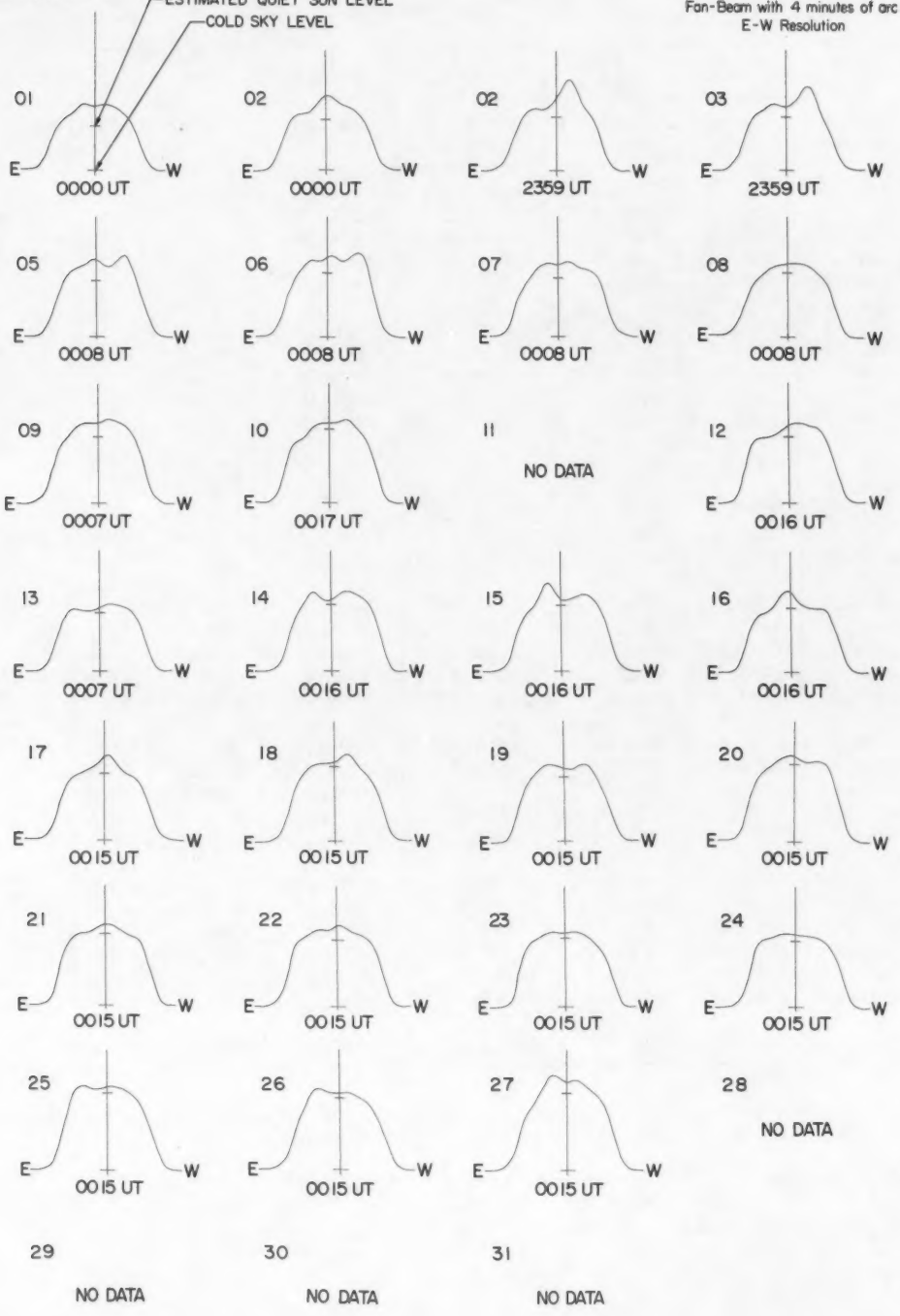
MAY 1975

Fleurs, Australia

ESTIMATED QUIET SUN LEVEL

COLD SKY LEVEL

43 cm
Fan-Beam with 4 minutes of arc
E-W Resolution



COSMIC RAY INDICES

(Neutron Monitors)

MAY 1975

MAY 1975	THULE Average cts/hr	ALERT Average cts/hr	DEEP RIVER Average cts/hr	CALGARY Average cts/hr	SULPHUR MT Average cts/hr	KIEL Average cts/hr	CLIMAX Average cts/hr	TOKYO Average cts/hr
1	4595.3	7560.5	7102.1(12)	11852.6	9121.9	6387.3	4279.1(34)	3567.1
2	4625.0	7600.7	7109.8	11846.2	9118.1	6392.5	4281.2	3566.0
3	4613.1	7577.6	7093.3	11784.4	9094.4	6388.2	4278.6	3555.2
4	4613.5	7542.4	7099.8	11749.7	9061.1	6385.3	4273.5	3551.8
5	4580.9	7510.3	7052.8	11631.6	8924.5	6329.3	4267.5	3558.6
6	4532.5	7455.2	7006.7	11552.5	8805.7	6301.4	-- (0)	3542.6
7	4524.7	7443.4	7010.7	11568.8	8810.4	6313.1	-- (0)	3548.5
8	4542.3	7464.9	7041.3	11638.6	8874.6	6343.1	-- (0)	3562.1
9	4555.3	7489.9	7066.5	11697.8	9016.5	6375.0	-- (0)	3562.2
10	4564.9	7494.3	7075.4	11698.4	9020.2	6367.7	-- (0)	3567.4
11	4582.2	7533.4	7082.2	11770.3	9044.7	6373.3	-- (0)	3571.0
12	4571.1	7497.5	7074.0	11780.1	9044.2	6359.2	-- (0)	3566.1
13	4568.7	7493.9	7059.4	11735.8	9023.9	6340.0	-- (0)	3555.2
14	4574.5	7510.0	7071.3	11780.4	9027.8	6352.6	4246.5(12)	3562.7
15	4593.9	7525.6	7059.2	11757.5(16)	9028.6	6356.5	4238.2	3561.9
16	4574.5	7507.7	7054.5	-- (0)	9029.5	6349.4	4258.2	3546.6
17	4548.6	7462.8	7003.3	-- (0)	8962.1	6303.7	4228.0(6)	3537.0
18	4526.8	7424.9	6993.0	11729.7(16)	8962.8	6277.8	-- (0)	3537.2
19	4506.0	7426.5	6982.8	11550.9	8920.0	6258.0	4181.2(8)	3518.9
20	4490.6	7382.5	6932.2	11542.2	8885.1	6256.2	4199.8	3529.6
21	4496.8	7403.4	6940.5	11608.2	8899.7	6267.4	4199.9	3525.2
22	4517.8	7434.0	6957.3	11682.0	8925.8	6290.2	4203.9	3536.3
23	4529.1	7457.4	6989.2	11632.0	8971.2	6312.2	4219.5	3532.5
24	4549.7	7495.6	7026.0	11724.1	9006.2	6335.0	4224.2	3549.2
25	4580.8	7527.8	7032.8	11787.0	9037.4	6331.0	4242.5	3553.9
26	4553.6	7500.2	7022.4	11730.7	9006.2	6351.4	4245.8	3554.4
27	4580.3	7540.4	7072.3	11815.5	9080.3	6368.3	4262.8	3555.4
28	4579.6	7514.5	7074.8	11821.8	9072.2	6380.7	4262.7	3556.3
29	4569.5	7498.2	7041.4	11750.2	9033.9	6369.8	4249.5	3547.7
30	4562.5	7472.6	7042.3	11709.3	9015.1	6375.6	4249.2	3547.8
31	4583.4	7526.3	7032.8	11748.8	9034.1	6364.9	4232.5	3551.5
MEAN	4560.9	7492.7	7038.8	11713.0	8995.4	6340.5	4242.0	3550.9

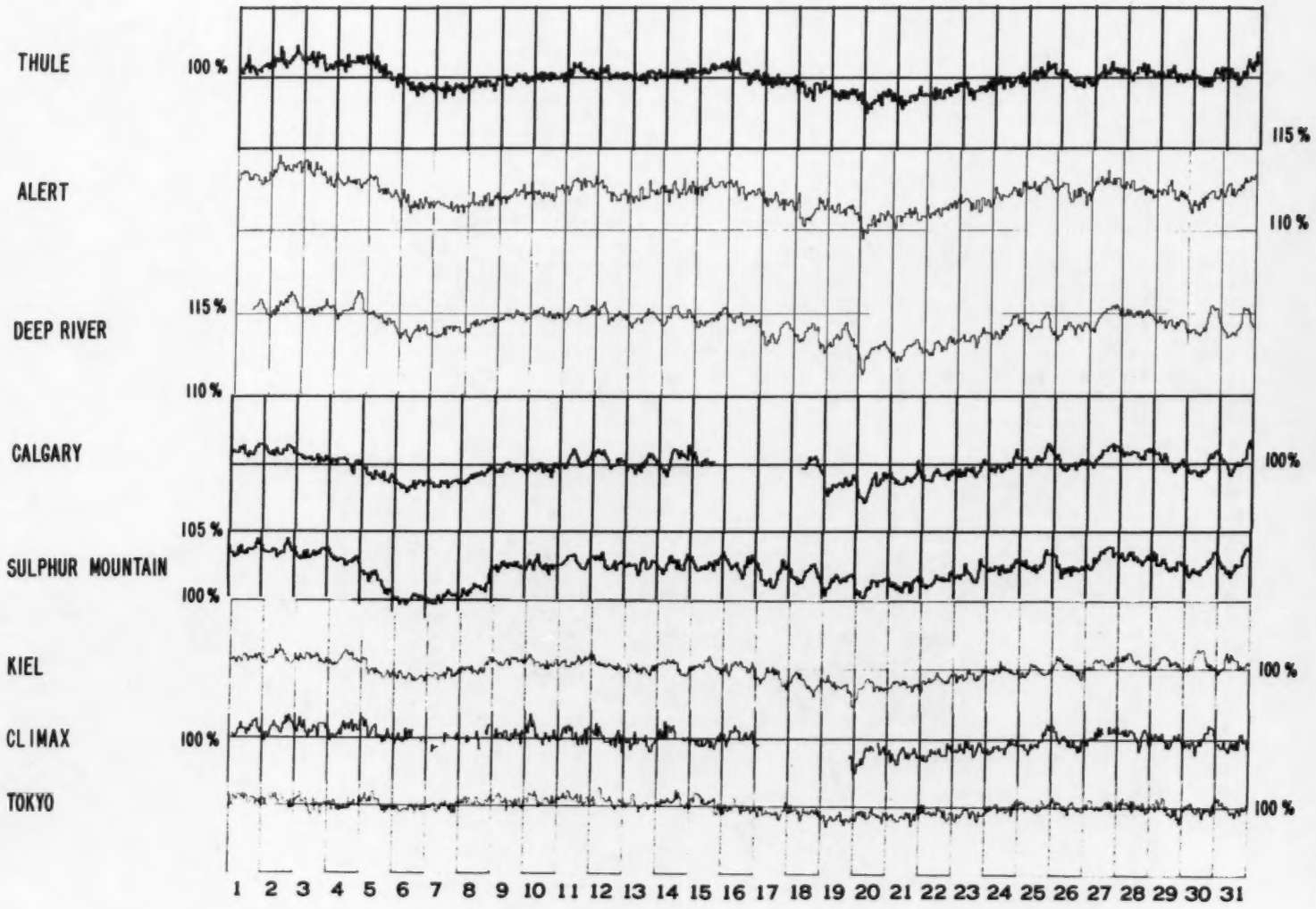
( ) Number of hours for which data are available if less than 24. Number of Section Hours at Climax if sum of both sections is less than 40 hours.

Thule, Alert, Calgary, Sulphur Mountain, Kiel and Climax Scaling Factors = 100.
Deep River Scaling Factor = 300.
Tokyo Scaling Factor = 128.

COSMIC RAY INDICES

(Neutron Monitors)

MAY 1975

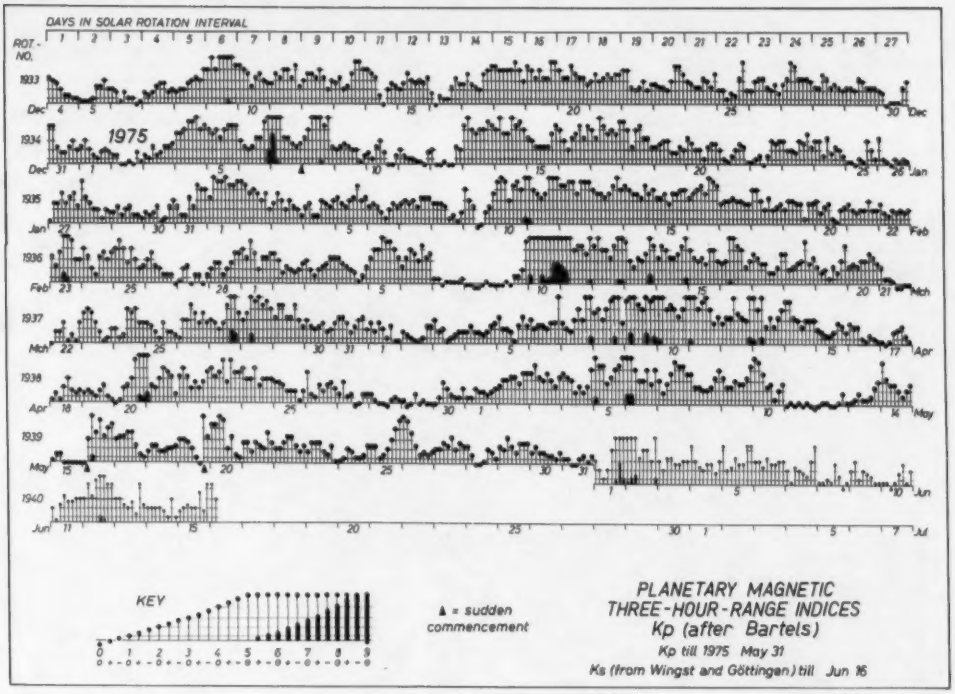


GEOMAGNETIC ACTIVITY INDICES

MAY 1975

Day	Three-Hour Range Indices Kp									Prel Ci	Cp	Ap	aa				
	1	2	3	4	5	6	7	8	Sum				N	S	M		
1 Q	1	1	2	2-	2-	1+	2-	2	12+	0.3	0.3	6	14	13	10	18	
2	2+	3	3	3+	3+	3-	4-	4-	25	0.9	0.9	16	32	35	25	42	
3	4-	4+	3+	3	4-	3	2+	3+	27-	0.9	1.0	19	34	36	36	34	
4	4-	3+	3	2-	2+	2-	2+	4	22	0.8	0.8	14	25	25	25	25	
5 D	6-	4+	4+	3-	3+	4	4+	5	34-	1.2	1.3	34	55	39	52	43	
6 D	6	6	4	3	3	4	3-	4	33-	1.3	1.4	35	49	47	58	39	
7 D	3	2-	3-	4-	5-	4+	4+	4-	28	1.2	1.1	22	32	41	23	50	
8	4-	2+	2+	2	2	2+	3+	4	22	0.9	0.8	14	27	21	19	30	
9	3+	2+	2+	3	3-	3-	3+	1+	24	0.9	0.9	16	27	34	22	39	
10	5	5-	4-	2+	3-	1	2	3-	24	1.1	1.0	19	30	30	40	20	
11QQ	0+	1-	0+	1-	0+	1-	0+	0	3+	0.0	0.0	2	4	4	4	4	CK
12QQ	0+	1-	1-	0+	0+	1-	2-	1-	5+	0.0	0.1	3	6	4	4	7	CC
13 Q	1-	1	2-	1	1	1+	2+	3	12	0.2	0.3	6	16	10	8	19	K
14	5-	3+	3-	3-	2	1+	2	3-	21+	0.8	0.8	14	24	28	30	22	
15QQ	1-	1+	1+	0+	0+	0+	0+	0+	5	0.0	0.1	3	7	4	6	6	C
16 D	0+	3	6-	4-	5-	3+	4	4+	29	1.3	1.2	28	41	47	32	56	
17	3	3+	3+	4-	4-	2+	1+	1	22-	0.8	0.8	14	27	30	34	23	
18 Q	2-	2+	2+	2-	2-	2	2	2+	16	0.4	0.4	7	19	19	19	19	
19	3	3	3-	2	1	0+	3	3+	20+	0.9	0.9	15	32	18	22	28	
20 D	4+	4+	5	5-	2	3+	1+	1	26	1.3	1.1	23	34	31	47	18	
21	3-	3-	2-	3-	2+	2	4-	3-	20+	0.6	0.7	12	24	20	21	24	
22	2	2	3-	3+	3+	2+	2-	2+	20-	0.5	0.6	11	19	22	23	19	
23	2-	3-	3-	3-	2-	1+	2+	1-	16-	0.4	0.4	8	16	12	16	12	
24 Q	1-	1	2	2-	1	1	1+	2+	11	0.1	0.2	5	14	10	13	11	CK
25	2+	2+	1	1+	2	3	4	5-	21-	0.9	0.8	14	36	21	17	41	
26	5	5-	4-	2+	1+	2-	1+	2-	22-	1.0	1.0	18	25	20	34	11	
27	2	2	3-	2+	3+	2	3-	2+	19+	0.6	0.6	10	19	19	17	22	
28QQ	2+	1+	0+	0+	1-	2	2-	1	10-	0.1	0.2	5	12	6	8	11	C
29	2+	2	3+	2+	2-	3-	3-	3-	20-	0.8	0.6	11	23	23	24	21	
30 Q	2-	2+	2-	2-	1+	1+	1	2-	13-	0.1	0.3	6	14	10	14	11	CK
31QQ	1	1	0+	0+	1	1+	1-	1+	7	0.1	0.1	4	11	6	6	10	CC
									MEAN	0.66	0.67	13	24.2	22.1	23.2		

GEOMAGNETIC ACTIVITY INDICES



DAILY AVERAGE INDICES Ap

DAY	1974 JUN	JUL	AUG	SEP	OCT	NOV	DEC	1975 JAN	FEB	MAR	APR	MAY
1	28	10	6	24	28	6	6	7	37	21	7	6
2	18	12	22	32	30	5	15	4	23	10	5	16
3	19	9	35	16	12	6	15	7	12	11	6	19
4	9	31	24	20	8	3	9	32	10	9	7	14
5	6	74	21	19	10	5	7	27	17	30	10	34
6	6	130	20	14	11	10	4	26	8	20	15	35
7	3	15	22	12	6	7	8	44	15	3	25	22
8	6	36	16	7	10	21	13	36	8	2	32	14
9	7	15	16	5	39	39	42	7	11	8	52	16
10	15	20	16	6	10	10	20	6	38	80	35	19
11	32	14	10	4	6	48	21	4	36	53	34	2
12	29	23	5	6	17	70	18	4	35	37	27	3
13	21	12	6	16	86	36	22	32	27	29	29	6
14	18	23	5	9	30	38	13	33	25	29	21	14
15	37	10	4	73	50	10	14	15	21	20	7	3
16	16	10	6	88	68	16	8	21	30	27	6	28
17	15	8	6	3	47	14	18	29	14	13	5	14
18	10	6	10	19	43	8	28	22	15	17	6	7
19	13	6	40	34	29	14	27	10	11	11	5	15
20	18	11	46	35	41	22	21	10	8	14	25	23
21	7	9	39	43	10	24	19	6	8	3	23	12
22	8	8	37	24	15	18	14	8	7	6	15	11
23	7	62	36	16	5	16	17	12	32	13	25	8
24	8	51	26	26	38	26	14	10	17	14	17	5
25	10	22	13	30	22	19	12	5	20	8	8	14
26	40	20	7	38	28	17	12	5	9	17	9	18
27	54	24	18	25	25	9	21	14	5	34	5	10
28	26	18	20	14	29	6	12	12	12	38	3	5
29	19	13	31	16	18	3	11	6		22	2	11
30	15	8	17	21	12	2	6	7		10	6	6
31		6	21		8		14	16		13		4
MEAN	17	24	19	23	26	18	15	16	18	20	16	13

PRINCIPAL MAGNETIC STORMS

MAY 1975

OBS. 2 letter IAGA code	GEOMAG-NETIC LATI-TUDE	COMMENCEMENT DAY	hr min (UT)	TYPE	SC - AMPLITUDES D(')	H(y)	Z(y)	MAXIMUM 3 HOUR - INDEX K DAY(3 HOUR PERIOD)	K	RANGES D(')	H(y)	Z(y)	UT END DAY	HOUR
HD	7.6N	1	0616	SC	- 0.4	+19	- 1	01(3)	4	5	109	26	03	01
PM	18.7S	1	0616	SC	+ 0.2	+12	+10	05(3) 06(2) 07(5)	5	6	80	40	10	13
CO	64.6N	4	23--	..	..	..	..	06(2,3,4)	6	189	1470	810	06	19
NE	55.1N	4	21--	..	..	..	..	06(1,2)	6	39	143	173	08	08
WI	54.2N	4	21--	..	..	..	..	05(1,7,8) 06(1,2,6) 07(5,6,7)	5	25	185	90	08	03
FR	49.6N	4	23--	..	..	..	..	05(1) 06(1)	6	42	140	78	06	11
IR	41.0N	4	02--	..	..	..	..	07(5)	6	15	159	38	08	05
TU	40.4N	4	23--	..	..	..	..	06(2)	6	15	110	35	06	13
HO	21.1N	4	23--	..	..	..	..	06(2)	4	10	75	51	06	12
HD	7.6N	4	2100	..	..	..	..	05(3,6,7) 06(1,2,6)	4	5	87	27	06	17
GU	4.0N	4	2313	..	..	..	..	05(3)	5	0	80	40	08	15
HR	33.7S	4	21--	..	..	..	..	05(1) 06(1,2)	5	26	48	73	06	10
BD	48.9N	5	21--	..	..	..	..	06(1)	6	29	114	73	06	13
SJ	29.9N	5	1342	..	..	..	..	06(1)	5	07	83	16	06	24
HD	7.6N	6	2000	..	..	..	..	07(5)	5	3	100	18	08	03
NE	55.1N	9	2128	SC	2	22	..	10(1,2)	5	31	103	121	10	15
HR	33.7S	9	14--	..	..	..	..	09(8) 10(1)	5	16	73	56	10	14
KG	56.5S	13	1924	SC	..	..	..	13(7) 14(1)	4	--	--	--	14	07
CO	64.6N	16	0308	SC*	-10	+47	+ 5	16(5)	7	152	1270	810	16	19
NE	55.1N	16	0308	SC	1	22	3	16(3)	6	31	205	166	17	18
WI	54.2N	16	0306	SC*	- 1 *	+26	0	16(3,5,8)	5	15	185	45	17	18
FR	49.6N	16	0308	SC	- 0.5	+23	- 3	16(3)	6	27	90	75	17	19
BD	48.9N	16	0318	SC	- 1	17	- 2	16(3)	5	19	110	56	17	19
IR	41.0N	16	02--	..	..	..	..	16(5)	6	29	87	50	17	20
TU	40.4N	16	0307	SC	- 1	+17	+ 1	16(3)	6	10	110	25	17	18
SJ	29.9N	16	0306	SC	+ 0.5	13	3	16(5)	5	10	64	18	17	12
MB	21.3N	16	0307	SC	--	+16	- 2	16(8)	4	--	--	--	17	03
HO	21.1N	16	0308	SC	- 0	+ 3	+ 2	16(3)	5	6	77	18	17	--
AL	9.5N	16	0307	SC	..	..	..	16(3)	5	4	120	27	16	24
HD	7.6N	16	0306	SC	+ 0.1	+20	- 1	16(3,5)	5	4	131	23	17	21
GU	4.0N	16	0307	SC	..	17	- 5	16(3)	6	0	110	40	17	16
AN	1.5N	16	0307	SC	- 0.7	26	10	--	-	3	137	47	16	24
TV	1.1S	16	0307	SC	0.6	21	32	--	-	3	150	93	16	24
PM	18.7S	16	0307	SC*	+ 0.2*	+17	+16	16(3,5)	5	4	120	80	17	16
HR	33.7S	16	03--	..	..	..	..	16(5)	5	14	88	61	17	15
GN	43.2S	16	0308	SC	+ 5	+ 3	+ 2	16(5)	7	27	90	140	17	16
CO	64.6N	19	1950	SC*	+26	-63	+50	20(3,4)	7	116	1330	570	20	11
SI	60.0N	19	1951	SC*	+11.1*	-26.0*	-14.8*	20(3)	7	80	540	660	20	10
NE	55.1N	19	1951	SC*	2	18	..	--	-	--	--	--	--	--
WI	54.2N	19	1951	SC*	- 2	+78 *	0	19(7,8) 20(6)	5	15	165	45	20	19
FR	49.6N	19	1950	SC*	- 0.5	-15	+ 1	20(1)	6	21	140	46	20	11
BD	48.9N	19	1950	SC*	- 1	28	- 3	20(1)	6	17	147	65	20	22
IR	41.0N	19	1954	SC*	- 3	50	7	19(7) 20(1,4)	5	15	110	30	20	20
TU	40.4N	19	1950	SC*	- 2	+30	+ 1	20(1)	6	10	135	15	20	12
SJ	29.9N	19	1951	SC*	- 0.5	25	9	20(1)	6	05	96	24	20	10
MB	21.3N	19	1951	SC	- 0.7	+36	- 3	20(1)	6	2	90	9	20	18
HO	21.1N	19	1950	SC*	+ 1 *	+21	+ 8	20(1)	6	5	113	23	20	10
AL	9.5N	19	1951	SC	- 0.5	32	- 4	20(1)	6	4	109	25	20	18
HD	7.6N	19	1951	SC	- 0.3	+31	- 3	20(1)	5	3	119	17	20	19
GU	4.0N	19	1950	SC	1	20	- 6	20(1)	6	0	170	30	20	18
AN	1.5N	19	1951	SC	- 1.1	34	19	--	-	3	128	48	20	18
TV	1.1S	19	1951	SC	0.3	26	38	--	-	3	132	129	20	18
PM	18.7S	19	1950	SC*	+ 0.6*	+18	+18	20(1)	5	4	140	70	20	19
HR	33.7S	19	1950	SC	+ 1	+21	+14	20(1)	5	12	74	74	20	18
KG	56.5S	19	1952	SC	..	..	..	19(7)	5	--	--	--	20	18
NE	55.1N	20	0042	SC	4	45	6	20(3)	6	40	219	230	20	18
NE	55.1N	25	16--	..	..	..	..	26(2)	6	38	112	147	26	12
WI	54.2N	25	16--	..	..	..	..	25(7) 26(1)	5	25	105	65	26	09
BD	48.9N	25	21--	..	..	..	..	26(2)	6	29	89	56	26	15
AL	9.5N	25	16--	..	..	..	..	25(6,7,8) 26(1)	4	4	44	30	26	20
HD	7.6N	25	1630	..	..	..	..	25(6,7,8)	4	3	43	16	26	19
AN	1.5N	25	16--	..	..	..	..	--	-	3	49	49	26	20
TV	1.1S	25	16--	..	..	..	..	--	-	3	87	34	26	20
HR	33.7S	25	16--	..	..	..	..	26(1)	5	14	67	76	26	17
AL	9.5N	27	0633	SC	- 0.6	26	- 5	27(3)	5	5	84	26	28	05
HD	7.6N	27	0633	SC	- 0.5	+27	- 1	27(3)	4	4	89	21	28	03
AN	1.5N	27	0633	SC	- 0.1	42	17	--	-	3	106	28	28	05
TV	1.1S	27	0633	SC	0.0	41	48	--	-	3	107	76	28	05

Reports were received from the following observatories:

College, Sitka, Newport, Witteveen, Fredericksburg, Boulder, Irkutsk, Tucson, San Juan, Honolulu, M'Bour, Alibag, Hyderabad, Guam, Annamalainagar, Trivandrum, Port Moresby, Hermanus, Gnangara, Toolangi, Port-aux-Francais

SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS

MAY 1975

PRELIMINARY REPORT ON RAPID MAGNETIC VARIATIONS (by Dr. A. Romana)

The meaning of the station symbols is given in the IAGA-Bulletins nr. 12 and 32. Times of ssc and si are mean values. If given by ten or more stations they are underlined.

Sudden commencements followed by a magnetic storm or a period of storminess (ssc)

16 0308 A: VI LG FR PE KS; B: SO WN WI FU IK EB KA PM LM GN; C: NI CI SZ PP TN

19 1951 A: SO WN WI VI OT LG IK EB TL FR PE KS QU SZ LM DU; B: DO FU IK CI KA PM PP GN CZ KG; C: NI (si: B: SS)

27 0634 A: LB KS; B: QU PP? LM; C: EB TL PE (si: B: TN; C: KA)

Sudden impulses found in the magnetograms (si)

01 0616 B: WN FU EB KA TN; C: TL? (ssc: B: KS QU PM; C: NI IK PP - sfe: SS)

27 1817 B: WN WI FU EB TL (ssc: B: VI IK QU; C: PE - sfe: LG SZ)

Solar-flare effects (sfe)

Effects confirmed by ionospheric or solar observations are underlined.

03 1347 - 1401 SZ

13 1602 - 1611 LG

16 1841 - .... SS

21 1654 - 1703 LG

27 1323 - 1340 SO TL (si: B: WN)

30 1501 - 1510 LG

RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

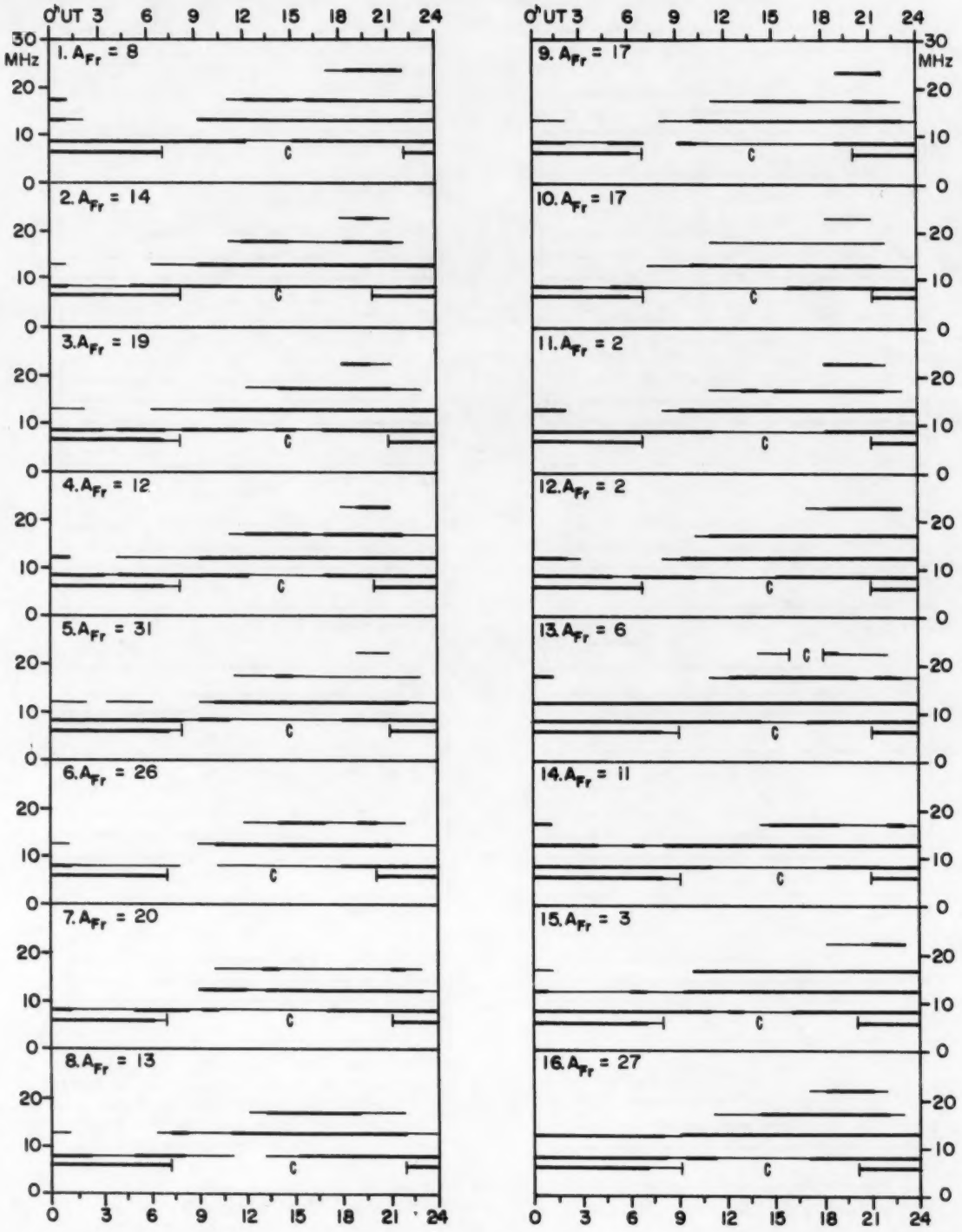
MAY 1975

North Atlantic

MAY 1975	WHOLE DAY INDICES NORTH ATLANTIC	ADVANCE FORECASTS (JC-REPORTS) FOR WHOLE DAY	NORTH ATLANTIC								GEOMAGNETIC INDICES		
			6-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF				K_{FR}		A_{FR}
			00 TO 06	06 TO 12	12 TO 18	18 TO 24	02	08	14	20	HALF DAY (1)	HALF DAY (2)	OBSERVED
01	6o	6	6o	6-	6+	6+	6	6	5	6	2	2	8
02	6o	6	6-	5+	6o	7-	6	6	5	6	3	3	14
03	6+	6	6o	6-	7o	6+	6	6	6	5	(4)	3	19
04	6+	6	7-	5+	6+	7-	5	5	6	5	3	2	12
05	6o	5	6o	5o	6+	6+	5	5	5	5	(4)	(4)	31
06	6-	4	6-	5o	6-	6-	5	4	4	5	(5)	2	26
07	6o	4	6-	5+	6+	6+	4	5	5	5	3	(4)	20
08	5o	5	6o	6-	7-	6+	5	4	6	5	3	3	13
09	6o	5	6o	6o	6+	7-	5	5	6	6	3	3	17
10	6-	5	6o	6o	6-	6-	5	4	5	5	(4)	2	17
11	6o	5	6-	6o	7-	6+	5	5	6	6	1	0	2
12	6+	6	6+	6+	6+	7-	6	6	6	6	1	1	2
13	6-	6	6o	5o	6+	6o	6	6	6	6	1	2	6
14	6-	6	6-	4+	6o	6o	6	6	6	6	3	1	11
15	6-	6	5+	5+	6o	6o	5	6	6	6	1	1	3
16	6-	6	6o	6-	6-	6o	6	6	4	5	(4)	(4)	27
17	6+	6	6+	6o	6+	6+	5	4	5	5	(4)	2	16
18	6o	5	6o	6o	6o	6-	5	5	5	5	3	2	10
19	6o	5	6o	6o	6o	6o	6	5	5	6	3	3	17
20	6-	5	5+	6-	6o	6o	5	5	5	5	(5)	2	28
21	6o	5	6o	6o	6o	6o	5	5	5	6	3	3	11
22	6-	5	6o	5+	6-	6-	5	5	5	5	3	2	8
23	6o	5	6o	6+	6o	6o	5	6	6	6	3	2	8
24	5+	6	6o	7-	6+	6+	6	6	6	6	1	1	5
25	6o	6	6+	6o	6o	6o	6	6	6	6	2	3	10
26	6-	6	6-	6-	5o	6-	6	5	5	5	(4)	2	19
27	6o	6	6-	6o	6+	6+	5	5	5	6	3	3	12
28	6+	6	6o	7-	6-	6+	5	5	6	6	2	2	6
29	5+	6	7-	6+	6-	6+	6	6	6	6	3	3	12
30	6+	6	6+	6+	6+	6+	6	5	6	6	2	1	6
31	6+	5	6o	6o	6+	6+	6	6	6	6	1	2	4

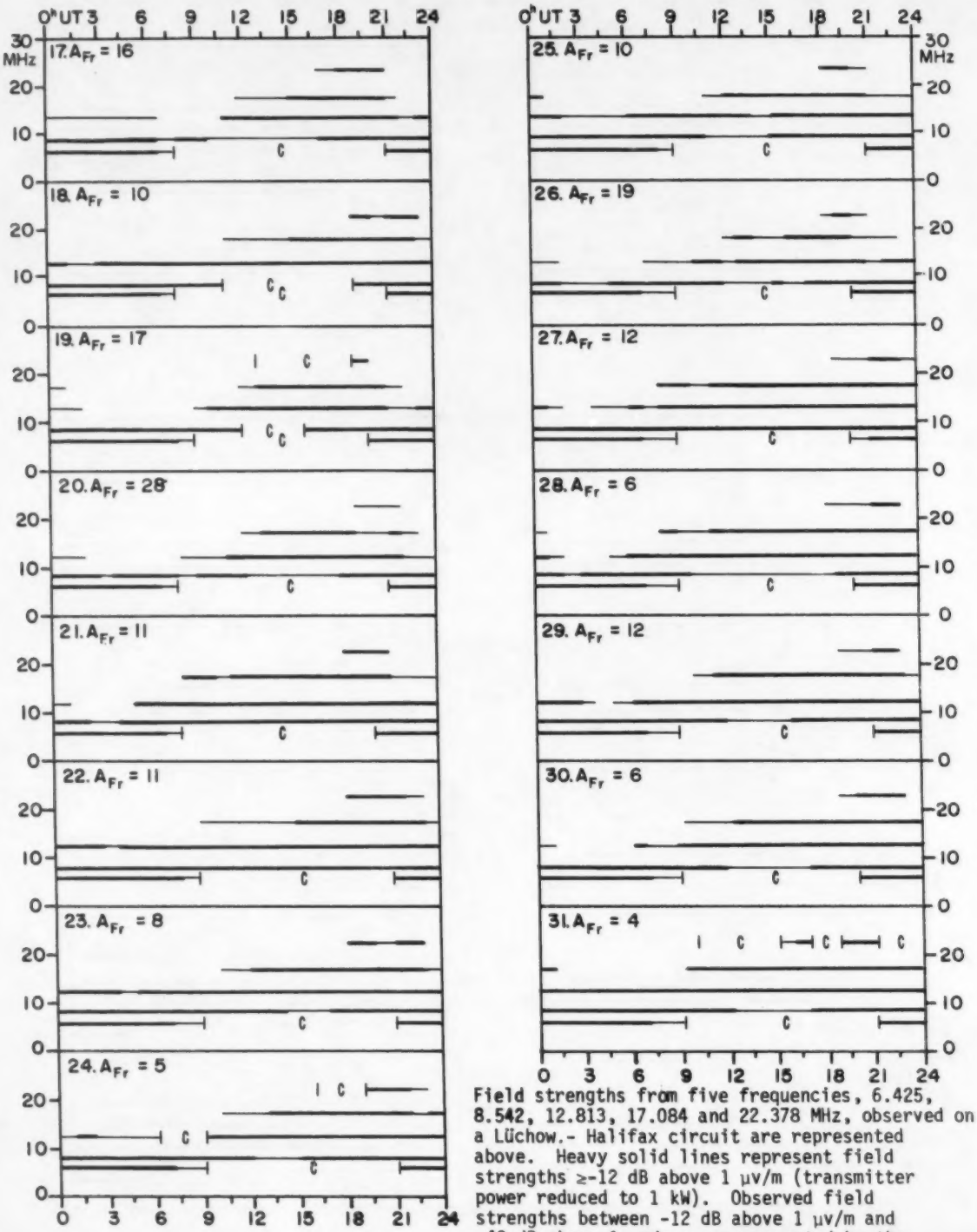
TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

MAY 1975



TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

MAY 1975



Field strengths from five frequencies, 6.425, 8.542, 12.813, 17.084 and 22.378 MHz, observed on a Lüchow.- Halifax circuit are represented above. Heavy solid lines represent field strengths ≥-12 dB above 1 μv/m (transmitter power reduced to 1 kW). Observed field strengths between -12 dB above 1 μv/m and -40 dB above 1 μv/m are represented by the fine line. Adopted from Observations by Deutsche Bundespost

RADIO PROPAGATION QUALITY INDICES

MAY 1975

Quality Indices calculated for reception at Lüchow

	TOKYO	HALIFAX	MAURITIUS	CANBERRA	BRACKNEL
1	5.1	7.3	7.7	4.5	12.1
2	4.8	7.2	7.1	5.0	14.2
3	4.5	6.8	6.6	4.9	12.4
4	5.1	7.6	6.7	4.7	12.8
5	4.2	6.0	6.2	4.1	11.6
6	3.7	5.3	6.3	4.3	11.2
7	2.9	5.7	5.5	4.4	12.9
8	2.7	6.0	4.0	3.5	11.1
9	2.7	6.3	5.2	3.8	11.7
10	3.5	6.1	4.9	4.7	12.2
11	4.8	7.4	5.0	4.1	12.5
12	5.7	8.2	5.9	5.1	13.4
13	4.6	7.9	6.9	5.1	13.9
14	4.2	7.1	7.6	5.9	13.5
15	6.5	7.6	6.6	5.6	13.5
16	4.6	6.5	7.0	5.3	12.5
17	3.9	6.2	6.2	4.9	12.6
18	4.9	7.7	5.6	4.6	13.1
19	4.8	6.8	5.9	4.7	12.2
20	3.9	6.2	6.0	4.7	11.7
21	4.9	7.9	7.2	4.7	12.2
22	4.8	7.7	6.9	5.1	12.1
23	5.5	7.8	6.2	5.5	12.4
24	5.7	8.1	6.3	5.3	12.2
25	4.1	6.9	6.1	4.9	11.9
26	3.3	7.0	5.9	5.7	12.0
27	5.3	8.5	6.5	5.2	12.6
28	5.0	8.3	6.8	6.6	12.8
29	4.5	8.4	7.1	6.2	12.6
30	5.6	8.2	6.8	5.6	12.6
31	5.8	8.8	6.5	5.8	13.1
MEAN	4.6	7.2	6.3	5.0	12.5

The method of calculation of the radio propagation indices changed in July 1974. An absolute quality figure is calculated for a 24-hour period from Tokyo, Halifax, Mauritius (Africa) and Canberra. The figure 0.0 corresponds to a median field strength of -30 dB above 1μV/m (converted into 1 kW and referred to an omnidirectional antenna). The figures 1 to 10 are in steps of 5 dB with the figure 10.0 corresponding to a median field strength of +20 dB above 1μV/m. The field strength of the frequency with the highest value for each hour is used in place of a mean of all recorded frequencies. This is done on the assumption that the optimum frequency would be used for communication.

USCOMM-NOAA-ASHEVILLE--7-31-75--950

AMERICAN REVOLUTION BICENTENNIAL
1776-1976

July 1975 Number 371-Part II

Solar-Geophysical Data comprehensive reports

Data for January 1975–December 1974 & Miscellanea

Explanation of Data Reports Issued as Number 366 (Supplement) February 1975

SEE ERRATA PAGE 2

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Solar - Geophysical Data

NO. 371 JULY 1975

Part II (Comprehensive Reports)

DATA FOR
JANUARY 1975
DECEMBER 1974
& MISCELLANEA

NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO

For obtaining bulletins on a data exchange basis, send request to: World Data Center A for Solar-Terrestrial Physics, NOAA, Boulder, Colorado 80302.

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To standardize referencing these reports in the open literature, the following format is recommended:

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SOLAR - GEOPHYSICAL DATA

No. 371

Issued in two parts

Hope I. Leighton, Editor

J. Virginia Lincoln, Director
Solar - Terrestrial Data Services Division

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A.8g	Daily Values of Adjusted Solar Flux (AFCRL)	361A 7	362A 7	363A 7	364A 7	365A 7	366A 7	367A 7	368A 7	369A 7	370A 7	371A 7
A.9cb	8.6 mm Radio Maps of the Sun (NELC - La Posta)	---	---	---	365A 26	366A 24	367A 24	368A 26	369A 26	370A 24	371A 24	
A.9d	2 cm Radio Maps of the Sun (NELC - La Posta)	362A 32	363A 28	364A 32	365A 26	366A 24	367A 24	368A 26	369A 26	370A 24	371A 24	
A.10a	169 MHz - Interferometric Observations (Nançay)	361A 13	362A 14	364A110	364A 13	365A 12	366A 12	367A 12	369A101	369A 12	370A 12	371A 12
A.10c	21 cm East-West Solar Scans (Fleurs)	361A 15	362A 16	363A 15	364A 15	365A 14	366A 14	367A 14	368A 14	369A 14	371A100	371A 14
A.10d	43 cm East-West Solar Scans (Fleurs)	361A 16	362A 17	363A 16	364A 16	365A 15	366A 15	367A 15	368A 15	369A 15	371A101	371A 15
A.10e	10.7 cm East-West Solar Scans (Ottawa-ARO)	361A 14	362A 15	363A 14	364A 14	365A 13	366A 13	367A 13	368A 13	369A 13	370A 13	371A 13
A.11e	Solar X-ray Spectroheliograms (OSO-5; 1969-6A)	362A 32	363A 28	364A 32	365A 26	367B 55	368B 58	369B 36	369A 26	371B 24	371A 24	
A.11g	Solar X-ray (SMS-1 GOES)	---	---	---	364A 21	365A 18	366A 18	367A 18	368A 18	369A 20	370A 18	
A.12ba	Cosmic Ray Protons (Pioneers 6 & 7)	361A 18	---	---	---	365A 17	---	---	---	369A 18	370A 16	371A 18
A.12bb	Cosmic Ray Protons (Pioneers 8 & 9)	361A 19	362A 22	---	364A 19	---	---	---	---	369A 19	370A 17	371A 19
A.12d	Solar Protons (NOAA 2, 3 & 4) Graphs	361A 20	362A 23	363A 22	364A 24	---	---	---	---	---	---	---
A.13a	Solar Wind (Pioneers 6 & 7)	361A 18	---	---	---	365A 17	---	---	---	369A 18	370A 16	371A 18
A.13d	Solar Wind from IPS Measurements	---	---	---	---	---	366A 17	367A 17	368A 17	369A 17	370A 15	371A 17
A.17	Interplanetary Magnetic Field (Pioneer 8)	361A 19	362A 22	---	---	---	---	---	---	369A 19	370A 17	371A 19
A.17	Interplanetary Magnetic Field (Pioneer 9)	361A 19	---	363A 21	364A 19	---	---	---	---	369A 19	---	371A 19
A.17c	Inferred IP Magnetic Field	361A 23	362A 26	363A 24	364A 27	365A 21	366A 20	367A 20	368A 21	369A 22	370A 20	371A 20
A.18	Interplanetary Electric Field (Pioneer 8)	361A 19	362A 22	---	---	---	---	---	---	369A 19	370A 17	371A 19
A.18	Interplanetary Electric Field (Pioneer 9)	361A 19	---	363A 21	364A 19	---	---	---	---	369A 19	---	371A 19
B.	Ionospheric (and Radio Wave Propagation) Phenomena											
B.51ca	High Latitude Quality Figures and Forecasts	362A119	363A123	364A119	365A109	366A111	367A111	368A103	369109	370A105	371A108	
B.52	Graphs of Transmission Frequency Range	362A120	363A124	364A120	365A110	366A112	367A112	368A104	369A110	370A106	371A109	
B.53	Quality Figures Based on Frequency Ranges	362A122	363A126	364A122	365A112	366A114	367A114	368A106	369A112	370A108	371A111	
C.	Flare-Associated Events											
C.1a	Optical Observations Flares	361A 10	362A 10	363A 10	364A 10	365A 10	366A 10	367A 10	368A 10	369A 10	370A 10	371A 10
C.1ba	Optical Observations Flares (Standardized Data)	366B 4	367B 4	368B 4	369B 4	370B 4	371B 4					
C.1d	Flare Patrol Observations	361A 12	362A 13	363A 13	364A 12	365A 11	366A 11	367A 11	368A 11	369A 11	370A 11	371A 11
C.1d	Flare Patrol Observations	366B 14	367B 20	368B 24	369B 14	370B 11	371B 6					
C.1e	Flare Indices (by day)	366B 13	367B 16	368B 20	369B 11	370B 8	371B 5					
C.1f	Flare Indices (by Region)	367B 52	368B 56	369B 34	370B 26	371B 22						
C.3	Solar Radio Waves - Outstanding Occurrences	366B 15	367B 21	368B 25	369B 15	370B 12	371B 7					
	Solar Radio Waves - Fixed Frequencies - Selected	361A 17	362A 18	363A 17	364A 17	365A 16	366A 16	367A 16	368A 16	369A 16	370A 14	371A 16
C.3t	43.25, 80 and 160 MHz Selected Bursts (Culgoora)	362A111	363A115	365B106	365A101	366A100	367A103	368A 95	369A100	370A 97	371A 99	
C.4a	Solar Radio Spectral Obs. (Fort Davis)	362A104	363A101	364A104	365A 94	366A 94	367A 96	368A 91	369A 95	370A 93	371A 94	
C.4b	Solar Radio Spectral Obs. (Boulder)	362A104	363A101	364A104	365A 94	366A 94	367A 96	368A 91	369A 95	370A 93	371A 94	
C.4d	Solar Radio Spectral Obs. (Culgoora)	362A104	363A101	365B103	365A 94	366A 94	367A 96	368A 91	369A 95	370A 93	371A 94	
C.4e	Solar Radio Spectral Obs. (Weissenau)	362A104	363A101	364A104	365A 94	366A 94	367A 96	368A 91	369A 95	370A 93	371A 94	
C.4f	Solar Radio Spectral Obs. (Sagamore Hill)	362A104	363A101	364A104	365A 94	366A 94	367A 96	368A 91	369A 95	370A 93	371A 94	
C.4h	Solar Radio Spectral Obs. (Dwingeloo)	362A104			365A 94	366A 94	367A 96	368A 91	369A 95	---	---	
C.4i	Solar Radio Spectral Obs. (Dürnten)	362A104	363A101	364A104	365A 94	366A 94	367A 96	368A 91	369A 95	370A 93	371A 94	
C.4j	Solar Radio Spectral Obs. (Manila)	362A104	363A101	364A104	365A 94	366A 94	367A 96	368A 91	369A 95	370A 93	371A 94	
C.5e	Solar X-ray (SMS-1 GOES)				364A 23	365A 20	366A 18	367A 18	368A 18	369A 20	370A 18	
C.6	Sudden Ionospheric Disturbances	362A103	363A 99	364A102	365A 93	366A 93	367A 95	368A 90	369A 94	370A 92	371A 93	
D.	Geomagnetic and Magnetospheric Phenomena											
D.1a	Geomagnetic Indices Cl, Cp, Kp, Ap, aa - Selected Days	362A114	363A118	364A113	365A104	366A103	367A106	368A 98	369A104	370A100	371A104	
D.1ba	27-Day Chart of Kp Indices	362A115	363A119	364A114	365A105	366A105	367A107	368A 99	369A105	370A101	371A105	
D.1c	27-Day Chart of C9	366A107	366A107	366A107	366A107	366A107						
D.1d	Principal Magnetic Storms	362A117	363A121	364A116	365A107	366A109	367A109	368A101	369A107	370A103	371A106	
D.1e	Reduced Magnetograms	---	367B 40	368B 44	---	---	---					
D.1f	Sudden Commencement and Solar Flare Effects	362A118	363A122	364A118	365A108	366A110	367A110	368A102	369A108	370A104	371A107	
D.1g	Equatorial Indices Dst	362A116	363A120	364A115	365A106	366A108	367A108	368A100	369A106	370A102		
F.	Cosmic Rays											
F.1a	Cosmic Ray Neutron Counts (Deep River)	362A112	364B 42	364A111	365A102	366A101	367A104	368A 96	369A102	370A 98	371A102	
F.1b	Cosmic Ray Neutron Counts (Climax)					366A101	367A104	368A 96	369A102	370A 98	371A102	
F.1e	Cosmic Ray Neutron Counts (Alert)	362A112	364B 42	364A111	365A102	366A101	367A104	368A 96	369A102	370A 98	371A102	
F.1f	Cosmic Ray Neutron Counts (Calgary)	362A112	363A116	364A111	366B 32	366A101	367A104	368A 96	369A102	370A 98	371A102	
F.1g	Cosmic Ray Neutron Counts (Sulphur Mountain)	362A112	363A116	364A111	366B 32	366A101	367A104	368A 96	369A102	370A 98	371A102	
F.1h	Cosmic Ray Neutron Counts (Thule)	363B 47	363A116	364A111	365A102	366A101	367A104	368A 96	369A102	370A 98	371A102	
F.1i	Cosmic Ray Neutron Counts (Kiel)	362A112	363A116	364A111	365A102	366A101	367A104	368A 96	370A102	370A 98	371A102	
F.1j	Cosmic Ray Neutron Counts (Tokyo)	362A112	363A116	364A111	365A102	366A101	367A104	368A 96	369A102	370A 98	371A102	
H.	Miscellaneous											
H.60	IUWDS Alert Decisions	361A 4	362A 4	363A 4	364A 4	365A 4	366A 4	367A 5	368A 4	369A 5	370A 5	371A 5
H.62	Abbreviated Calendar Record	367B 44	368B 48	369B 25	370B 17	371B 13						

Note: A = Part I, B = Part II.
362A 32 listed under Aug shows that data for August 1974 were contained in *Solar-Geophysical Data* Number 362 - Part I beginning on page 32.

Errata: The index page numbers published last month in SGD-370 for 370B (Part II), involving December and January data, were incorrect. Please make changes to correspond with this month's table.

SGD 371 Part II (Comprehensive)

JANUARY 1975 DATA

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Hα SOLAR FLARES

JANUARY 1975

OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE JAN	START	END	MAX. PHASE	APPROX. LAT.	APPROX. LONG. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Millionths of Disk	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
MANI	01	0132	0149	0135	N05	E90	1.000		7.8	17	SF	2		0135	50	1.7			
MANI	01	0139	0147	0142	N07	W52	.797		28.2	8	SF	2		0142	30	.5			
HTPR	01	1041	1100	1047	N07	W60	.872		27.9	19	SF		C	1047	20	.4			E
HTPR	01	1110	1120	1112	N07	W60	.872		28.0	10	SF		C	1112	20	.4			E
ABST	02	0937E	0949D	0941	S08	E27	.459		4.4	12D	SF		P	0941	87	1.0			D
MONT	02	1102	1105	1103	N06	W73	.960		28.0	3	SF		C	1103	20				
MONT	02	1116	1123	1118	N08	W73	.960		28.0	7	SF		C	1118	20				
MITK	03	0323	0357	[34D	N08	W89	1.000	13404	27.5	34	1B		C	0340	50				DG
PALE	03	0335E	0344D	0339	N10	W88	1.000		27.5	9D	SN	2	C		40				
PALE	03	0338E	0351	0341U	N10	W88	1.000		27.6	13D	SB	2	V		40				
CATA	03	0740E	0800D	0800	S12	E11	.242		4.1	20D	SF	1		0800	56	.6		(135)	
CATA	05	0720	0800	0725	N12	E58	.863		9.7	40	1N	1		0725	112	2.3		(170)	
MANI	05	0729E	0741	0735U	N12	E57	.855		9.6	12D	SF	2		0735	70	1.3			
HTPR	05	1321	1336	1323	N13	E45	.739		8.9	15	SF		C	1323	10	.2			E
PALE	05	2325	2342	2331U	S13	W24	.431		4.2	17	SN	2	V		40				DE
MANI	05	2326E	2335D	2330U	S07	W24	.409		4.2	9D	SN	1		2330	50	.66			H
PALE	06	0030	0041	0033	S13	W24	.431		4.2	11	SF	2	V		40				DE
MANI	06	0728	0737D	0736	N04	E20	.364		7.8	9D	SN	2		0736	180	2.0			FH
CATA	06	0735	0920	0755	N05	E20	.370		7.8	105	1B	3		0755	225	2.5		(214)	
HTPR	06	0815E	0855		N04	E20	.364		7.8	40D	SF		C	0815	30	.3			
ATHN	06	1124	1133	1125	S 9	W33	.548		4.0	9	SN	4	V		16				DE
HTPR	06	1127	1134	1128	S10	W32	.536		4.1	7	SF		C	1128	10	.1			D
CATA	06	1450	1505	1450	N11	E40	.674		9.6	15	SN	3		1450	56	.8		(151)	
MCMA	06	1454E	1508		N12	E41	.690	13411	9.7	6D	SN		P	1454	40	.6			E
PALE	06	1915	1935	1918	N10	W34	.595		4.3	20	SF	2	C		70				DE
PALE	06	1915	1935	1918	N 7	W35	.595		4.2	20	SF	2	V		70				DE
MITK	07	0318	0340	0323	N10	W40	.671		4.1	30	SN		C	0323	80	1.1			D
MITK	09	0050	0108	0055	N06	W14	.295		8.0	18	SF		C	0055	80	.9			D
MANI	09	0127E	0138	0130	N05	W17	.328		7.8	11D	SF	2		0130	60	.6			
MANI	09	0308	0325D	0315	N06	W17	.336		7.9	17D	SF	2		0315	50	.6			
ABST	09	0658E	0703	0658	N16	E74	.969		14.8	5D	SF		P	0658	70			73	D
PALE	09	2023E	2023D		N16	E66	.929		14.8		SN	2	C						DE
CATA	10	0820	0835	0820	S10	E90	1.000		17.1	15	SF	3		0820	28			(141)	
ARCE	10	0928	0958	0940	N05	W38	.630		7.5	38	SN			0940	46	.6			
MONT	10	0938	0959	0941	N05	W35	.589		7.8	21	SF		C	0941	50				B
MONT	10	1132	1156	1145	N05	W36	.603		7.8	24	SF		C	1146	20				
RAMY	10	1133E	1156	1134	N 4	W36	.600		7.8	23D	SF	3	C		45				DE
RAMY	10	2000E	2119		N10	W90	1.000		4.1	79D	SN	3	C						
RAMY	11	2053	2115	2104	N18	E37	.678		14.6	22	SF	3	C		27				F
VORO	12	0144	0151	0145	N02	W58	.851		7.7	7	SB		C	0145	45	.8		70	DJ
VORO	12	0314	0327	0318	N02	W58	.851		7.8	13	SB		C	0318	81	1.5		72	DJ
ATHN	12	0706	0728	0709	N 7	E48	.757		15.9	22	SN	3	V		96				U
ATHN	12	0707	0727	0709	N 3	E50	.771		16.0	20	SN	2	C		48				U F
TACH	12	0710	0732	0717	N02	E52	.792		16.2	22	SN		C	0717	133	2.2		16	E
HTPR	12	1032	1044	1050	N07	W66	.919		7.5	12	SN		C	1044	20				
ABST	12	1037	1053	1042	N05	W66	.918		7.5	16	1F		C	1042	87	2.1		51	DJ
ABST	12	1137	1158D	1140	N03	W68	.929		7.4	21D	1F		P	1140	87			51	DJ
RAMY	12	2053	2118	2114U	N16	E24	.518		14.7	25	SF	3	C		36				
RAMY	12	2112E	2133D	2114U	N 6	E41	.672		16.0	21D	SF	3	C		45				DE
PALE	12	2246E	2249D	2248U	N16	E25	.529		14.8	3D	SF	2	C		30				DE
PALE	12	2247E	2252D	2248U	N16	E25	.529		14.8	5D	SF	3	V		30				DE
MITK	12	2333	2350	2334	N17	E23	.516		14.7	17	SN		C	2334	50	.6			D
MITK	13	0036	0045	0041	N17	E23	.518		14.8	7	SF		C	0041	50	.6			D
MITK	13	0049	0119	0058	N17	E22	.507		14.7	30	SB		C	0058	80	1.0			D
VORO	13	0053	0109	0056	N17	E21	.496		14.6	16	SB		C	0056	90	1.0		71	DJ
MANI	13	0101E	0106D	0101U	N18	E23	.527		14.8	5D	SN	2		0101	60	.7			
CATA	13	0750	0755	0750	N17	E20	.486		14.8	5	SN	3		0750	28	.3		(151)	
HTPR	13	1154	1214D		N04	E35	.587		16.1	20D	SF		C	1212	50	.6			E
ABST	14	0717	0728	0720	N03	E23	.409		16.0	11	SF		C	0720	157	1.8		45	EGJ
CATA	14	0805	0815	0805	N17	E07	.383		14.9	10	SF	3		0805	56	.6		(135)	
ABST	14	0809	0814	0810	N17	E07	.383		14.9	5	SF		C	0810	140	1.5		50	EJV
CATA	14	0940	0955	0945	N17	E06	.379		14.9	15	SN	3		0945	56	.6		(162)	
ABST	14	0940	1010	0943	N17	E06	.379		14.9	30	SN		C	0943	157	1.7		52	FJK
ABST	14	1046	1101	1053	N04	E21	.385		16.0	15	SF		C	1053	87	1.0		52	DGJ
PALE	14	2018	2028	2014U	N 2	E15	.281		16.0	18	SF	3	C		100				DE
MANI	16	0552	0633	0601	N02	W05	.145		15.9	41	SN	2		0601	190	2.0			F
ABST	16	0704E	0727	0709	N02	W08	.180		15.7	23D	SF		P	0709	87	.9		45	DJ

NOTE: The measured area is now reported in millionths of the solar disk.

Hα SOLAR FLARES

JANUARY 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE JAN	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
MITK	17	0155	0245	0215	N01	W21	.371		15.5	50	SF		C	0215	80	.9			DH
PALE	17	0214	0246	0218	N 2	W19	.344		15.7	32	SF	3	C		123				F
ABST	18	0649	0617	0613	N12	E23	.476		20.0	8	SF		C	0613	140	1.6		52	EJ
ABST	19	0635	0641D	0636	N15	W61	.896		14.7	6D	SF		P	0636	96	2.0		50	E
ABST	19	0718	0740	0720	N17	W60	.892		14.8	22	SB		C	0720	96	2.0		76	DK
TACH	19	0720	0728	0722	N16	W68	.945		14.2	8	SN		C	0722	88			66	DL
ABST	19	0802E	0812	0803	N03	W47	.739		15.6	10D	SF		P	0803	96	1.4		48	FGJ
ABST	19	0855	0906	0901	N03	W48	.750		15.8	11	SF		C	0901	87	1.3		50	DG
HTPR	19	1037	1058	1046	N03	W50	.772		15.7	21	SF		C	1046	20	.3			
ABST	19	1038	1059	1045	N02	W49	.760		15.8	21	SF		C	1045	70	1.1		52	DGJ
HTPR	19	1147	1150	1148	N03	W50	.772		15.7	3	SF		C	1148	10	.1			
HTPR	19	1200	1220	1201	N03	W51	.783		15.7	20	SF		C	1201	10	.1			
HTPR	19	1346	1348	1347	N07	E06	.231		20.0	2	SF		C	1347	20	.2			
MONT	20	1013	1020	1017	N07	W02	.211		20.3	7	SF		C	1017	20				H
ABST	20	1030	1037	1032	N07	W02	.211		20.3	7	SF		C	1032	79	.8		52	DJK
ABST	21	0802	0829	0805	N09	E32	.572		23.7	27	SF		C	0805	122	1.5		55	EJ
MANI	21	0803	0825	0815	N09	E31	.559		23.7	22	SF	2		0815	80	1.0			E
HTPR	22	1346	1352	1346	N08	W35	.606		19.9	6	SF		C	1347	30	.4			E
HTPR	22	1350	1435	1421	N16	W78	.985		16.7	45	SF		C	1421	30				
HTPR	22	1354	1430	1358	N07	W36	.615		19.9	36	SF		C	1358	30	.3			EK
HTPR	22	1442	1537	1500	N16	W80	.990		16.6	55	SF		C	1500	20				
HTPR	22	1554	1602D		N16	W81	.992		16.6	8D	SF		C	1556	30				
ABST	24	0715	0728	0718	N06	W57	.848		20.0	13	SF		C	0718	114	2.0		50	DJ
HTPR	30	1419	1431	1424	N07	E54	.823		3.6	12	SF		C	1424	20	.3			

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by a high speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H and K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked asymmetry in Hα line suggests ejection of high velocity material.
S = Brightness follows disappearance of filament (same position).
T = Region active all day.
U = Two bright branches, parallel (||) or converging (Y).
V = Occurrence of an explosive phase: important and abrupt expansion in about a minute with or without important intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide Hα line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

NOTE: Several changes in the presentation of the Grouped Flare Data have been planned to begin with the January 1975 data. The preparation of the new presentation has been delayed because of problems in computer conversions. Therefore, only the observatory flare reports are included here. The grouped flares will no longer be classified as "confirmed" or "unconfirmed". The flare list for this month will be republished later and will include a summary line for each flare.

DAILY FLARE INDICES
Includes all Flares

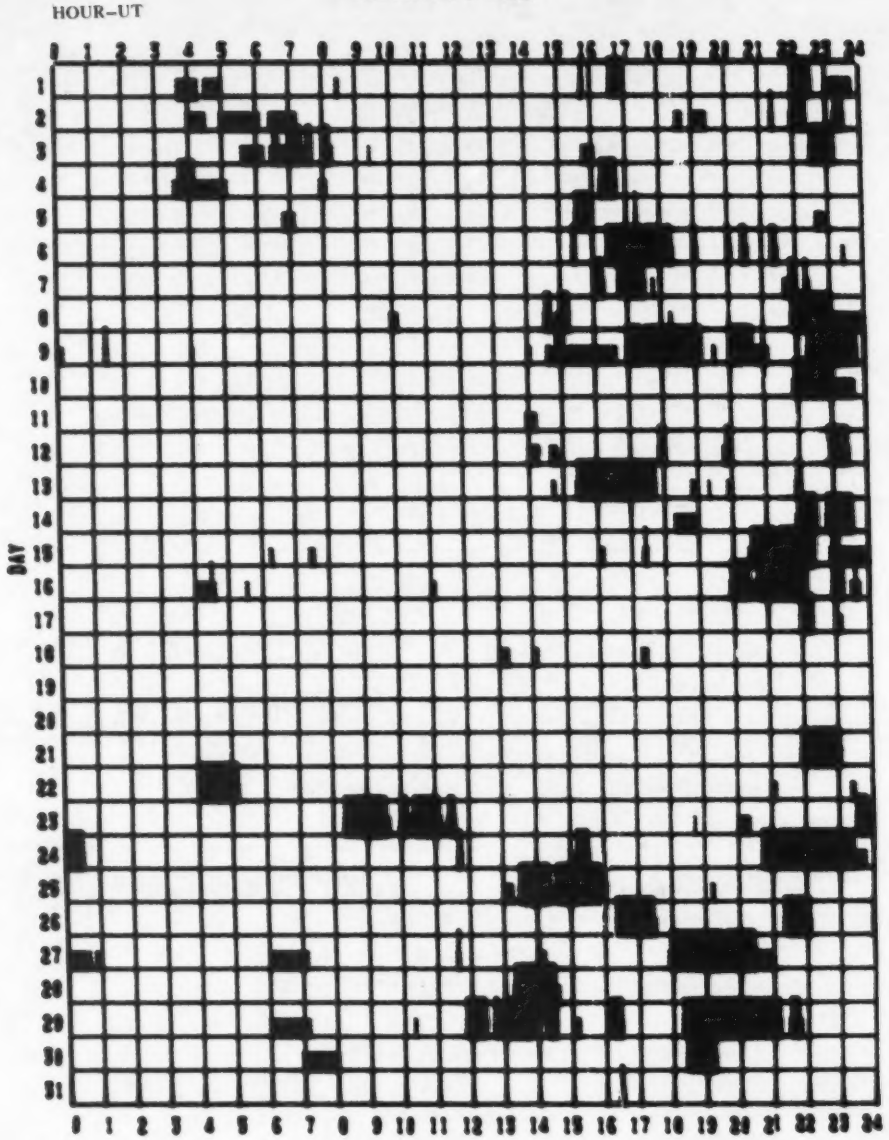
Date	Flare Index	HR OBS	Date	Flare Index	HR OBS	Date	Flare Index	HR OBS
750101	2.24	23.1	750111	0.38	24.0	750121	5.44	23.0
750102	4.44	23.4	750112	20.96	23.0	750122	2.21	22.9
750103	2.72	22.5	750113	6.75	21.4	750123	0.00	21.3
750104	0.00	23.0	750114	34.57	22.7	750124	7.72	20.4
750105	5.49	23.5	750115	0.00	22.0	750125	0.00	21.8
750106	31.45	21.0	750116	23.26	21.6	750126	0.00	23.0
750107	3.38	23.0	750117	5.49	23.6	750127	0.00	21.4
750108	0.00	22.4	750118	10.34	24.0	750128	3.09	22.8
750109	11.22	19.5	750119	19.58	24.0	750129	0.00	18.7
750110	2.75	23.0	750120	3.50	24.0	750130	0.21	23.5
						750131	0.00	23.9

When no Flare Index is given, it is 0 for that day.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

JANUARY 1975



Observatories included in total patrol:

Abastumani	Catania	Hurbanovo	Manila	Tachkent
Arcetri	Culgoora	Kharkov	McMath-Hulbert	Tehran
Athenes	Haute Provence	Kiev	Mitaka	Upice
Boulder	Herstmonceux	Kodaikanal	Monte Mario	Voroshilov
Bucharest	Huancayo	Locarno	Palehua	Wendelstein
		Lvov	Ramey	Zürich

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JANUARY 1975

JAN 1975	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
1	245	SGMR	43 NS	1630	1945.8	285 D	38.2			
	18	MCMA	6 S	1831	1834	3			2	
	18	MCMA	41 F	1839	1845	7			2	
2	29	UPIC	8 S	1047	1047.2	0.3				
	1470	BERL	3 S	1114.5	1115.5	3.5	8.5	2.4		
	3000	BERL	1 S	1115	1115.2	6	2.8	0.5		
	2800	OTTA	27 RF	1450		50	1.4	1.2		
	2800	OTTA	24 R	1450	1500	10	1.4	0.7		
	2800	OTTA	24P R	1500		35	1.4			
	2800	OTTA	26 FAL	1535	1540	5	1.4	0.7		
	18	MCMA	6 S	1608	1609	2			1	
	2800	OTTA	240 R	1657	1722	25	1.2	0.8		
	2800	OTTA	24P R	1722		300 D	1.2			
3	1415	MANI	22	0320.5	0328.7	28	4.9	1		
	2695	MANI	22	0321.8	0328.5	27.5	13.8	3.4		
	4995	MANI	22	0324.6	0326.5	21.4	23	5.8		
	8800	MANI	2	0325	0326.6	5.9	5.2	1.7		
	2000	TYKW	45 C	0324	0328.4	14	9	2		00L
	3750	TYKW	45 C	0324	0328.4	8	25	9		07R267100F
	9400	TYKW	45 C	0325	0328.3	5	22	10		25R
	8800	PALE	4	0325.8	0326.5	5.6	35	11		
	1420	SYDN	20 GRF	0326	0326.4	1	4			
	606	MANI	2	0328	0328.8	2.3	9.7	3.8		
	1000	TYKW	5 S	0328	0328.7	3	8	2		00L
	1420	SYDN	20 GRF	0328	0328.6	1.5	8			
	720	SYDN	45 C	0328.1	0328.7	2	30			
	9400	TYKW	29 PBI	0330		80	7	3		
	3750	TYKW	29 PBI	0332		75	3	1		
	100	GORK	42 SER	0650.7	0652 U	6.2	20 D			
	100	GORK		0650.7	0654.9U		20 D			
	200	GORK	42 SER	0651	0651.7	6	70			
	200	GORK		0651	0654.3		80			
	100	HIRA	45 C	0654	0654.3	3	620	60		WL
	283	DWIN	44 NS	0900		360		2		
	100	GORK	42 SER	0916.4	0916.7	7.6	45			
	100	GORK		0916.4	0918.6		45			
	100	GORK		0916.4	0923.7		45			
	127	TORN	42 F	0916.5	0919.5	10	11			UNCERTN
4	127	TORN	43 NS	0812 U	1310.5	180 U	90			
	100	GORK	43 NS	0909		120		5		
	200	GORK	43 NS	0918 E		102		5		
	260	ONDR	43 NS	0920	1040.7	307 D	29			
	245	SGMR	44 NS	1219 E	1343.6	538 D	16.9			
	18	MCMA	6 S	1406	1407	2			1	
5	200	GORK	44 NS	0627 E		300 D		10		
	100	GORK	44 NS	0630 E		330 D		10		
	260	ONDR	44 NS	0810 E	1206.3	365 D	22			
6	200	HIRA	45 C	0032.5	0033	1.2	200	70		WR
	100	GORK	44 NS	0624 E		151		10		
	650	GORK	1 S	0638	0640.3	5	5			
	100	GORK	42 SER	0641.2	0641.4	0.4	450			
	100	GORK		0641.2	0641.6		500			
	650	GORK	23 GRF	0713.1	0739	49	6			
	100	GORK	6 S	0715	0716 U	1.5	30 D			
	200	GORK	8 S	0721.6	0721.9	0.4	40	20		
	100	GORK	8 S	0721.6	0722.3U	0.9	30 D			
	950	GORK	48 C	0733	0747.5	28.8	2383			
	950	GORK		0733	0748.5		1490			
	200	GORK	4 S/F	0733	0739	6.3	120			
	1415	MANI	40	0733.1	0751.5	37.2	89	15.6		
	606	MANI	47	0733.2	0748.4	36	1320	303		
	1415	ATHN	46	0734.4	0747.5	28.1	37.4	14.2		
	1415	ATHN	46		0751.6		71.1			
	2950	GORK	21 GRF	0735.6	0745	22.1	3.2	1.6		
	2695	MANI	22	0736.6	0739.2	14.2	10.7	1.8		
	2950	GORK	42 SER	0738.5	0738.6	1	4.5			
	2950	GORK		0738.6	0739.5		5.4			
	650	GORK	48 C	0742	0747.1	16.5	1230			
	650	GORK		0742	0748.5		1140			
	2950	GORK	46 C	0746.2	0746.5	2	8.6	4.1		
	2950	GORK		0746.2	0747.3		8.2			
	2695	ATHN	1	0746.2	0747.5	2.4	7.7	2.3		
	930	BORD	45 C	1603.3	1603.8	0.8	13	2		
	930	BORD	45 C	1605	1606.5	3	24	2		
	4995	BOUL	3	1842.5	1844	2.5	11	3		
	18	MCMA	6 S	1847	1849	2			1	
7	536	ONDR	8 S	0944.6	0944.6	0.2	15			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JANUARY 1975

DAY 1975	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
	261	ONDR	2 S/F	1006.4	1007	1.2	5	1.4		
	260	ONDR	8 S	1121	1121	0.2	8			
	930	BORD	45 C	1329.6	1329.7	1	9	2		
	930	BORD	45 C	1519.7	1519.8	0.3	11	2		
8	260	ONDR	45 C	0900.7	0902	3.4	5	1		SUNRISE
	930	BORD	42 SER	1137	1138	2	11	2		
	930	BORD	45 C	1153	1153.4	1	48	2		
	260	ONDR	8 S	1207	1207	0.2	3			
	260	ONDR	8 S	1303.2	1303.2	0.2	5			
9	2000	TYKW	45 C	0646	0647.3	2	6	2		85L
	1000	TYKW	45 C	0655	0657	5	13	3		60L
	2000	TYKW			0659.8		40			30R
	200	TYKW	45 C	0655	0657	8	230	20		90L
	29	UPIC	4 S/F	0814.2	0815	2.4				
	1470	BERL	4 S/F	0814.3	0814.8	2.7	40	15		
	33	UPIC	4 S/F	0814.8	0814.9	1.9				
	1470	BERL	3 S	0923.2	0923.7	0.8	8.4	2.6		
	3000	BERL	1 S	0923.2	0923.7	0.8	1.2	0.3		
	29	UPIC	4 S/F	1023.1U	1023.9	1.4				
	113	POTS	40 F	1023.7	1024	0.5	100	10		
	33	UPIC	4 S/F	1023.8	1024	1.2U				
	1470	BERL	4 S/F	1026	1026.3	1.5	9.5	2.6		
	1470	BERL	3 S	1306	1306.4	0.5	5.3	1.8		
	1470	BERL	4 S/F	1333.3	1334	1.5	72	21		
	260	ONDR	8 S	1333.7	1333.7	0.7	9			SUNSET
	237	TRST	45	1333.8	1333.9	0.3	58	17		12R
	260	ONDR	8 S	1345.3	1345.3	0.2	4			SUNSET
	2800	OTTA	40 F	1844.8	1845.2	1	7.9			
	2800	OTTA	40 F	1855.5		3	10.6			
	2695	BOUL	45 C	1856.5	1857	2.5	12	4		
	260	OTTA	8 S	1958	1958.5	0.6	12.2			
	7040	SADP	4	2010.6	2011.3	1.5	44.1	21.5		21L
	4995	BOUL	3		2011	3	10	3		
	8800	PALE	4		2012	6.6	14	4		
	4995	SGMR	2 S/F	2012.1	2012.8	1.5	4.7	1.4		
	2800	OTTA	40 F	2012	2013	2	42			
	2695	SGMR	4 S/F	2012.1	2012.9	2.1	38	11.4		
	2695	BOUL	43 C	2012.5	2014	2.5	63	13		
	1415	SGMR	4 S/F	2012.1	2012.7	2	58.1	17.7		
	606	SGMR	4 S/F	2012.1	2012.9	2	25.4	7.6		
	410	SGMR	6 S	2012.1	2012.9	2	22.2	6.7		
	245	SGMR	6 S	2012.1	2013	2.3	79.7	23.9		
	2800	OTTA	8 S	2020	2020	0.1	3			
10	2300	TYKW	45 C	0010.3	0010.9	2	14	3		90L
	200	HIRA	45 C	0054	0054.5	1	80	20		WL
	3750	TYKW	20 GRF	0230	0240	30	1	0.5U		8R
	2000	TYKW	45 C	0245	0246.3	3	11	1.5		95L
	200	HIRA	45 C	0245	0246.9	3	150	40		WL
	1000	TYKW	45 C	0246	0246.3	1.5	1.1	0.4		8L
	2000	TYKW	5 S	0503	0503.5	1	4	1		90L
	2008	TYKW	45 C	0605	0609.4	8	1.5	0.5		40L
	650	GORK	3 S	0643.3	0644.5	1.6	8.2	4		
	260	ONDR	42 SER	1034	1040.8	10	7	0.4		
	260	ONDR	42 SER	1156.4	1200.5	92	4			
	536	ONDR	42 SER	1225.6	1234.8	24	13			
	608	ONDR	42 SER	1225.8	1225.8	15	18			
	18	HGMA	6 S	1342	1343	2			1	
	237	TRST	45	1402	1402.2	0.6	230 D			
	2695	PENT	1 S	2135	2135.7	1.5	1.4	0.7		
11	536	ONDR	2 S/F	1124.6	1125.7	1.8	3	1.1		
	260	ONDR	45 C	1144.7	1144.7	1.3	12	7		
	8800	ATHN	3	1152.2	1152.7	1.1	51.8	15.5		
	1420	BOUL	8	2058	2059	2.5	12	4		
	1415	SGMR	4 S/F	2058.7	2059	1.1	15.6	4.7		
	606	SGMR	3 S	2058.8	2059	.9	17.1	5.1		
	410	SGMR	6 S	2058.8	2059	1.2	14.4	4.3		
	245	SGMR	6 S	2058.8	2059	1	193	57.7		
	2800	OTTA	1A S	2059	2059.1	2	1.8	0.8		
	2800	OTTA	8 S	2059.1	2059.1	0.1	9.4			
12	100	GORK	44 NS	0630 E		330 D		5		
	100	HIRA	45 C	0707	0707.8	1.6	580	200		WL
	200	HIRA	45 C	0707	0707.8	1.5	160	30		
	200	HIRA	45 C	0709.5	0710.4	2	100	20		WR
	100	HIRA	45 C	0712.3	0712.5	1	770	250		WL
	33	UPIC	2 S/F	0801.4	0801.8	0.8				
	29	UPIC	2 S/F	0801.7	0801.9	0.6				
	33	UPIC	45 C	0803	0803.4U	1				
	29	UPIC	45 C	0803.1	0803.5	1.1				
	260	ONDR	42 SER	0941	1009.8	33	7	1.5		
	260	ONDR	42 SER	1142.5	1258.7	97	15			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JANUARY 1975

DAY UT	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION OR REMARKS
	18	HCMA	6 S	1748	1749	2			1	
	4995	BOUL	3	1845	1846	2.5	11	3		
13	1420	SYDN	40 F	0037.5	0038	0.7	16			
	200	HIRA	45 C	0052	0053	3.5	260	50		WL
	100	HIRA	45 C	0052.5	0053.5	2	530	80		WL
	2000	TYKW	45 C	0053	0053.7	1.5	20	2		25L
	1000	TYKW	45 C	0053	0053.7	1.5	2	0.5U		0L
	1420	SYDN	40 F	0053.5	0053.7	0.7	40			
	200	GORK	43 NS	0626 E		354 D		5		
	100	GORK	44 NS	0630 E		330 D		5		
	100	GORK	8 S	0639.4	0639.8U	0.7	30			
	100	GORK	8 S	0749.9	0750.5U	0.9	20 D			
	260	ONDR	44 NS	0848 E	1309.6	318 D	37			
	113	POTS	45 C	0917.5	0917.9	0.5	200	30		
	234	POTS	45 C	1040.8	1040.9	0.1	100	10		
	410	SGMR	44 NS	1217 E	1544.2	551 D	13.3			
	245	SGMR	44 NS	1217 E	1446.6	551 D	88.8			
	930	BORD	1 S	1557.6	1557.6	0.2	11	2		
	930	BORD	45 C	1604	1604.6	0.6	108	2		
	200	HIRA	44 NS	2150 E	0415	600 D	25	13		SL
	100	HIRA	45 C	2157	2157.7	1.5	420	150		WL
14	100	HIRA	45 C	0257.8	0258.2	1.5	570	100		WL
	200	HIRA	45 C	0257.8	0258	1	400 D	150 D		WL
	200	GORK	43 NS	0624 E		251 D		20		
	100	GORK	44 NS	0630 E		330 D		5		
	260	ONDR	44 NS	0835 E	1009.8	247 D	30			
	410	SGMR	44 NS	1216 E	1456.9	553 D	17.6			
	245	SGMR	44 NS	1216 E	2010.8	553 D	57			
	33	UPIC	45 C	0938.4	0938.9	2.9				
	29	UPIC	45 C	0938.5	0939.2	3.1				
	100	GORK	42	0938.5	0939	4.9	70 D			
	100	GORK		0938.5	0941		70 D			
	100	GORK		0938.5	0942.6		70 D			
	113	POTS	45 C	0940.5	0940.8	0.9	600	60		
	650	GORK	40 F	0942.5	0942.5	0.5	4.2			
	237	TRST	45	1203.2	1203.5	0.6	41	12		
	930	BORD	45 C	1534.2	1534.6	0.6	9	2		
	200	HIRA	44 NS	2150 E	2350	350 D	28	15		SL
15	234	POTS	45 C	0818.3	0818.3	0.2	100	20		
	260	ONDR	44 NS	0828 E	1348.3	345 D	44			
	245	SGMR	44 NS	1216 E	1826.3	554 D	343.2			
	33	UPIC	2 S/F	1055.6	1055.9	1				
	29	UPIC	2 S/F	1055.8	1056.1	1				
	237	TRST	42	1407	1407	3.5	210			
	113	POTS	41	1407.1	1407.2	9.1	3500	35		
	234	POTS	40 F	1407.1	1407.2	2.5	100	1 E		
	29	UPIC	3 S	1409.2	1409.3	0.6				
	33	UPIC	3 S	1409.3	1409.4	0.8				
	4995	BOUL	3	1846.5	1848	2	9	3		
16	200	HIRA	43 NS	0825	0050	130	30	13		SL
	8800	ATHN	4	0550.2	0550.7	6.5	34.6	10.4		
	260	ONDR	44 NS	0825 E	1312.2	348 D	27			
	808	ONDR	45 C	0831.3	0834	5.5	28	2.5		SUNRISE
	536	ONDR	45 C	0841.3	0844.2	5.5	10	1.7		SUNRISE
	808	ONDR	42 SER	0908.5	0937.4	36	16			
	536	ONDR	45 C	0911.2	0911.2	3	6	2.1		SUNRISE
	536	ONDR	40 F	0922	0939.5	18	11	1.5		
	127	TORN	2 S	1206.5	1207.1	1.2	35	12		
	930	BORD	45 C	1548.7	1548.7	0.3	11	2		
	930	BORD	45 C	1554.6	1554.9	0.7	13	2		
17	200	HIRA	43 NS	0225	0620	320 D	35	14		SL
	200	GORK	43 NS	0618 E		180				
	33	UPIC	2 S/F	1205.6	1205.8	1.3				
	29	UPIC	2 S/F	1205.7	1206.3	1				
	33	UPIC	42 SER	1305.6	1308.5	9.5U				
	29	UPIC	42 SER	1305.8	1308.9	7.5				
	100	HIRA	45 C	2158	2158.2	1	660	150		WR
	100	HIRA	45 C	2354	2354.2	1	780	300		WR
18	9240	ARCE	1	0901	0901.1	1				
	100	GORK	42 SER	0908.6	0911.4	19.8	65			
	100	GORK		0908.6	0918.5		65 D			
	100	GORK		0908.6	0922.3		65			
	100	GORK		0908.6	0927.2		400			
	113	POTS	41	0917.6	0918.4	10	220	5		
	127	TORN	46 C	0918	0922.4	12	120			
	29	UPIC	45 C	0924.8	0927.5	3.7				UNCERTN
	33	UPIC	45 C	0924.8	0927.4	4.2				UNCERTN
	127	TORN	41 F	1327 U	1331	6 U	15			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JANUARY 1975

DAY 1975	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	127	TORN	40 F	1347 U	1352.3	9 U	4.5			
19	100	HIRA	45 C	0633.5	0633.8	1.2	340	100		WR
	200	HIRA	45 C	0633.5	0634	1.2	100	30		WL
	3750	TYKW	5 S	0718	0718.7	1.5	9	3		OR
	2000	TYKW	5 S	0718	0718.4	1	4	2		OR
	100	HIRA	45 C	0718	0718.7U	2	1200 D	500 D		WL
	200	HIRA	45 C	0718	0718.8	1.3	150	50		WL
	113	POTS	45 C	0718.3	0718.8	1	200	70		
	2950	GORK	1 S	0718.4	0718.9	0.7	6.4	3.2		
	260	ONDR	8 S	0941.3	0947	5.7	8			
20	237	TRST	41	0900	0900	0.6	52			8L
	260	ONDR	8 S	0900.2	0900.2	0.2	10			SUNRISE
	113	POTS	41	1007	1014	9	350	15		
	260	ONDR	42 SER	1007.3	1014.8	9.5	44	15		
	29	UPIC	48 C	1007.4	1014.3	9				
	100	GORK	42 SER	1007.6	1008.6	8.1	150 D			
	100	GORK		1007.6	1014.4		1400 D			
	33	UPIC	48 C	1007.7	1014.1	8				
	237	TRST	42	1008	1014	27	120			5L
	127	TORN	46 C	1008	1014.6	8.5	90			
	260	ONDR	45 C	1029	1030	5.5	19	3		
	127	TORN	8 S	1030	1030.2	1	70	7		
	237	TRST	41	1243.2	1244.9	4.3	56 D			
	260	ONDR	8 S	1245	1245	0.2	25			
	536	ONDR	8 S	1324.3	1324.3	0.2	45			SUNSET
	808	ONDR	8 S	1324.4	1324.4	0.2	36			SUNSET
	536	ONDR	8 S	1342.8	1342.8	0.2	18			SUNSET
	1415	SGMR	4 S/F	1839.1	1839.3	1.5	113.9	34.2		
	606	SGMR	4 S/F	1839.1	1839.6	1	24.8	7.4		
	410	SGMR	6 S	1839.6	1839.8	.3	8.4	2.5		
	245	SGMR	6 S	1839.4	1839.7	1.2	77	23.1		
	606	SGMR	22 GRF	2007.7	2022.4	46.4	7.4	2.2		
	410	SGMR	6 S	2000.3	2002.7	8.4	1.6	.5		
	245	SGMR	6 S	2000.9	2006	6.7	2.5	.8		
21	260	ONDR	3 S	0904	0904.8	2.5	7	2.6		
	260	ONDR	21 GRF	1111	1303.3	118	8	5		
	930	BORD	1 S	1125.6	1125.7	0.1	10	1		
	260	ONDR	42 SER	1320	1343.7	33.5	13	1.4		SUNSET
	260	ONDR	45 C	1409.2	1409.2	5	23	6.3		SUNSET
	18	MCMA	6 S	1506	1508	3			1	
	410	SGMR	6 S	1507.1	1507.3	1	6.5	1.3		
	245	SGMR	6 S	1507	1507.3	1	32.8	6.6		
	18	MCMA	6 S	1550	1552	2			1	
	18	MCMA	6 S	1640	1641	2			1	
22	260	ONDR	8 S	1134.3	1134.3	0.2	61			
	260	ONDR	8 S	1141.2	1141.2	0.2	78			
	260	ONDR	8 S	1230.8	1230.8	0.3	32 U			
23	260	ONDR	8 S	1026	1026	0.2	14			
	260	ONDR	8 S	1029.3	1029.3	0.2	7			
	930	BORD	45 C	1543.3	1543.5	0.2	13	2		
24	930	BORD	1 S	1119.6	1119.6	0.1	10	1		
28	9240	ARCE	20	1004.5	1037.5	80				
30	100	HIRA	45 C	0124	0126.3	4	110	30		ML
	8800	ATHN	4	0842.4	0843.2	2.9	20.2	6.1		

Reports received from the following observatories:

ARCE = Arcetri
BERL = Berlin-Adlershof
BORD = Bordeaux
BOUL = Boulder
DWIN = Dwingeloo
GORK = Gorky
HIRA = Hiraiso
HUAN = Huancayo
MANI = Manila
MCMA = McMath-Hulbert
ONDR = Ondrejov
OTTA = Ottawa ARO
PENN = Penn. State Univ.
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
SYDN = Sydney
TORN = Torun
TRST = Trieste
TYKW = Toyokawa
UPIC = Upice

Explanation of Type Code:

1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
32 Absorption
40 Fluctuation
41 Group of Bursts
42 Series of Bursts
43 Onset of Noise Storm
44 Noise storm in Progress
45 Complex
46 Complex F
47 Great Burst
48 Major
49 Major +

SGD 371 Part II (Comprehensive)

DECEMBER 1974 DATA

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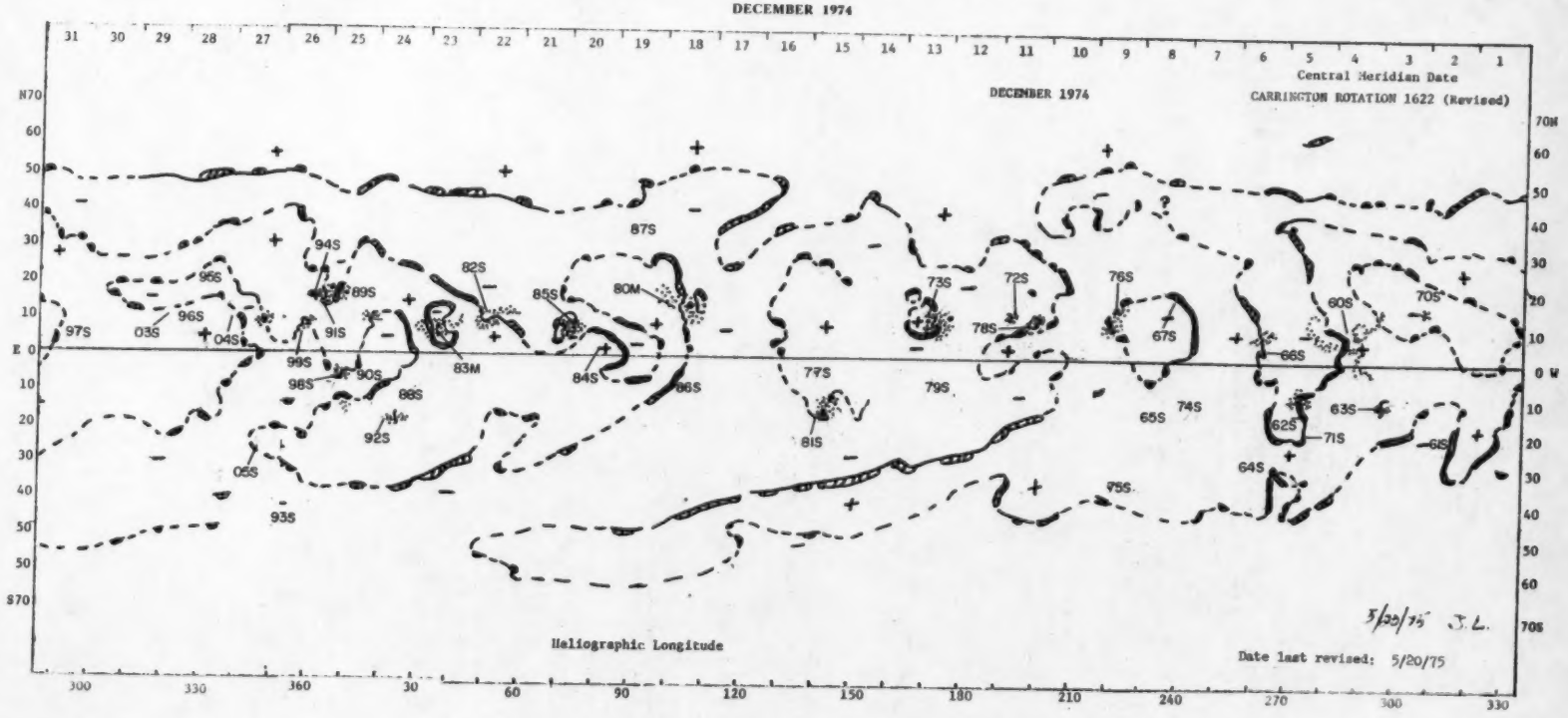
ABBREVIATED CALENDAR RECORD



13
Dec 74

DEC. 1, 1974 — 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 6QQ	Kp	1o | 0+ | 0+ | 1o | 1o | 2- | 3- | 3o
	sc	
Aurora	USSR	
	W.E.	ϕ = 58° 2400 (glow) S. Scotland
Cosmic Rays		
Green Corona		E Limb 7 days earlier: NE- no data; SE- no data; W Limb 7 days later: NW- no data; SW- no data
Indices		Rz: 0 (Final); 10cm flux: 82; Flare: 0/24.0; Cg: no data; Ip: -; Ig: 2
Solar Regions		
Sunspots		

DEC. 2, 1974 — 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 15	Kp	4- | 4o | 3- | 3- | 2+ | 3- ▲1722(9) | 3o | 2+
	sc	
Aurora	USSR	
	W.E.	ϕ = 58° 0000 (glow) S. Scotland
Cosmic Rays		
Green Corona		E Limb 7 days earlier: NE-; SE-; W Limb 7 days later: NW-; SW-
Indices		Rz: 0; 10cm flux: 81; Flare: 0/23.7; Cg: 4.2; Ip: -; Ig: 1
Solar Regions		13361 S21 (13370) N20
Sunspots		

DEC. 3, 1974 — 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 15	Kp	3+ | 3o | 2+ | 3- | 3- | 2o | 4+ | 3+
	sc	
Aurora	USSR	
	W.E.	
Cosmic Rays		
Green Corona		E Limb 7 days earlier: NE- no data; SE- no data; W Limb 7 days later: NW- moderately bright; SW- moderately bright
Indices		Rz: 9; 10cm flux: 79; Flare: 0/23.0; Cg: 3.9; Ip: 0; Ig: 2
Solar Regions		13363 S12
Sunspots		

DEC. 4, 1974 — 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	1
	m	1
	Dkm	
SID		
X-Rays		
Ap 9Q	Kp	3+ | 3o | 3- | 2o | 1+ | 1+ | 1o | 1o
	sc	
Aurora	USSR	
	W.E.	
Cosmic Rays		
Green Corona		E Limb 7 days earlier: NE-; SE-; W Limb 7 days later: NW- no data; SW- no data
Indices		Rz: 16; 10cm flux: 77; Flare: 0/24.0; Cg: 5.1; Ip: 0; Ig: 3
Solar Regions		13360 N08 (4)
Sunspots		

DEC. 5, 1974 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 7QQ	Kp	1- 1- 1- 1o 2+ 2+ 3o 2o
	sc	
Aurora	USSR	
	W.E.	
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- SW-
Indices		Rz: 17 10cm flux: 75 Flare: 0/21.9 Ca: no data Ip: 0 Ia: 3
Solar Regions		13371 S20 13362 S13 (5)
Sunspots		

DEC. 6, 1974 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 4QQ	Kp	2o 2- 1- 2- 1o 1o 0+ 1-
	sc	
Aurora	USSR	
	W.E.	
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- SW-
Indices		Rz: 8 10cm flux: 74 Flare: 0/23.7 Ca: 3.4 Ip: - Ia: 1
Solar Regions		13366 N05 (13364) S29
Sunspots		19521 N04 βp

DEC. 7, 1974 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	II
	Dkm	
SID		
X-Rays		
Ap 8Q	Kp	2- 1+ 2- 2+ 3- 3- 2- 2o
	sc	
Aurora	USSR	
	W.E.	
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- SW-
Indices		Rz: 7 10cm flux: 73 Flare: 0/23.7 Ca: no data Ip: - Ia: 1
Solar Regions		(13374) S12
Sunspots		

DEC. 8, 1974 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 13	Kp	2- 2o 2o 3- 3o 3+ 3o 4o
	sc	
Aurora	USSR	ϕ = 58° 1400-1600, ϕ = 59° 1700 (HBI)
	W.E.	ϕ = 60° 2250-2400 (glow) N. Scotland
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- no data SW- no data
Indices		Rz: 0 10cm flux: 72 Flare: 0/22.7 Ca: no data Ip: 0 Ia: 1
Solar Regions		(13367) N16 (13365) S15
Sunspots		

DEC. 9, 1974 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 42D	Kp	4o 5o 4o 5o 5o 5+ 5o 4+
	sc	
Aurora	USSR	ϕ = 59° 1200-1300 (HB1); ϕ = 57° 1300 (HA1), 1400-1800 (R:A2) and 1900-2000 (HA2); ϕ = 56° 2100-2400 (HP1)
	W.E.	ϕ = 59° (overhead ϕ = 63°-64°) 1600-1630 (HB) S. Norway
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- SW-
Indices		Rz: 0 10cm flux: 72 Flare: 0/22.8 Ca: 2.0 Ip: 0 Ig: 5
Solar Regions		(13376) N14 13375 S34
Sunspots		(19522) N14 (ap)2

DEC. 10, 1974 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

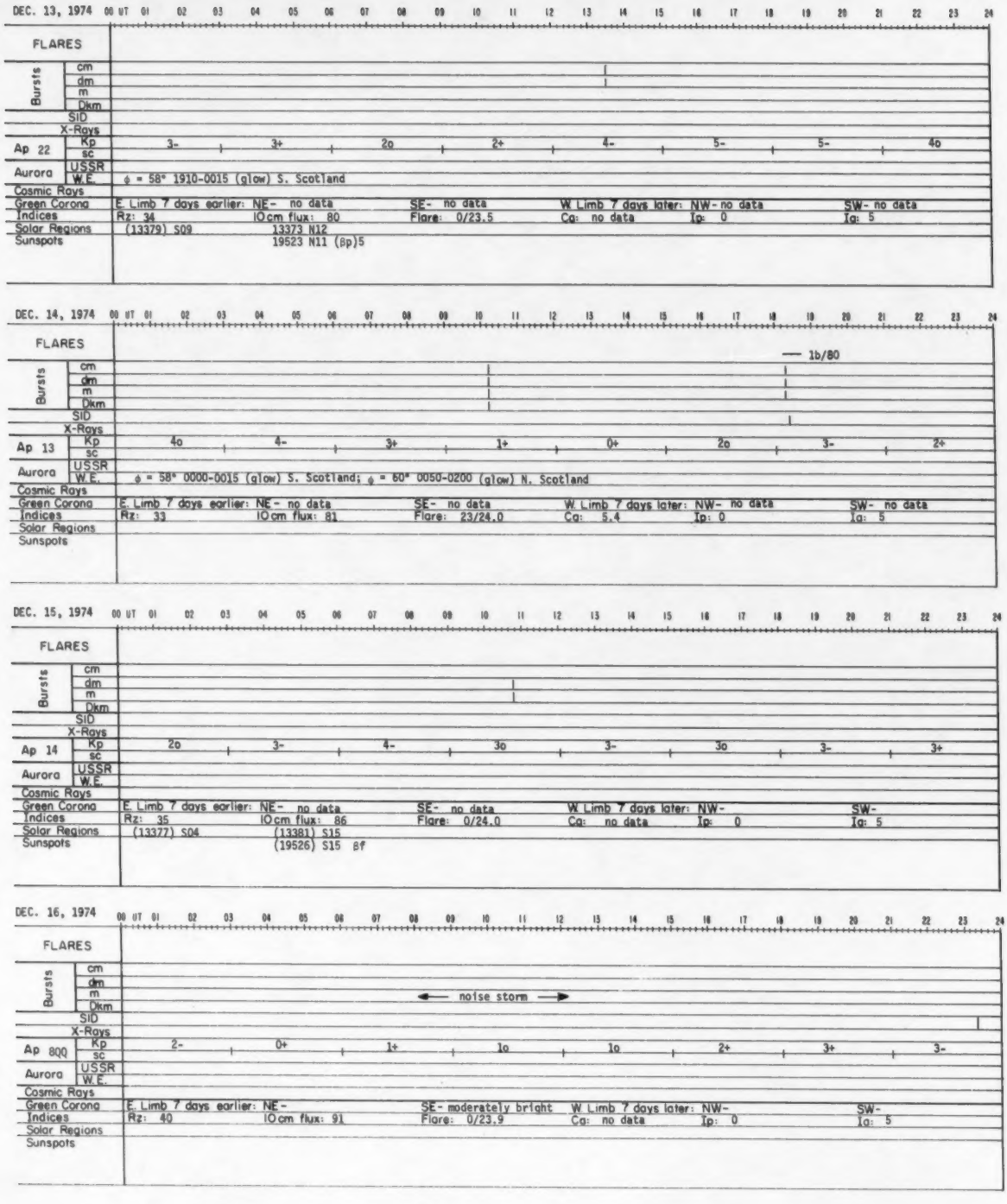
FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 20	Kp	4+ 4o 4- 2+ 3+ 4- 3o 3-
	sc	
Aurora	USSR	ϕ = 55° 1700 (HA1); ϕ = 54° 1800 (V1); ϕ = 53° 1600-2100 (HP1-2)
	W.E.	ϕ = 60° 0150-0400 (glow) N. Scotland
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- SW-
Indices		Rz: 9 10cm flux: 73 Flare: 0/22.6 Ca: 1.7 Ip: 0 Ig: 6
Solar Regions		
Sunspots		

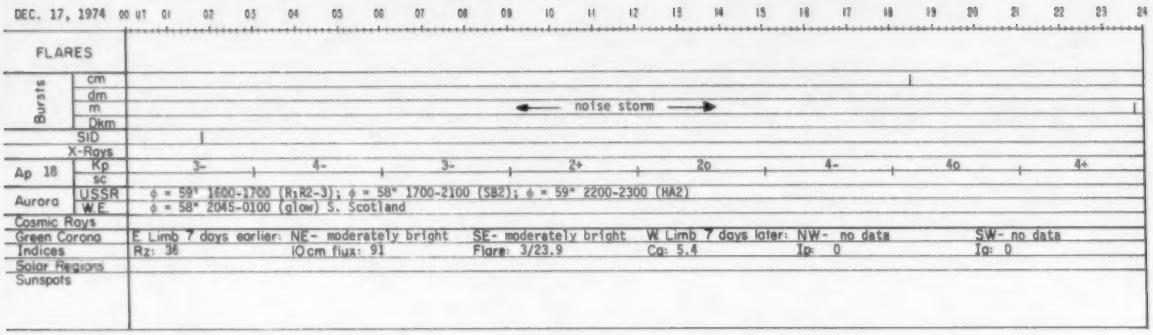
DEC. 11, 1974 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

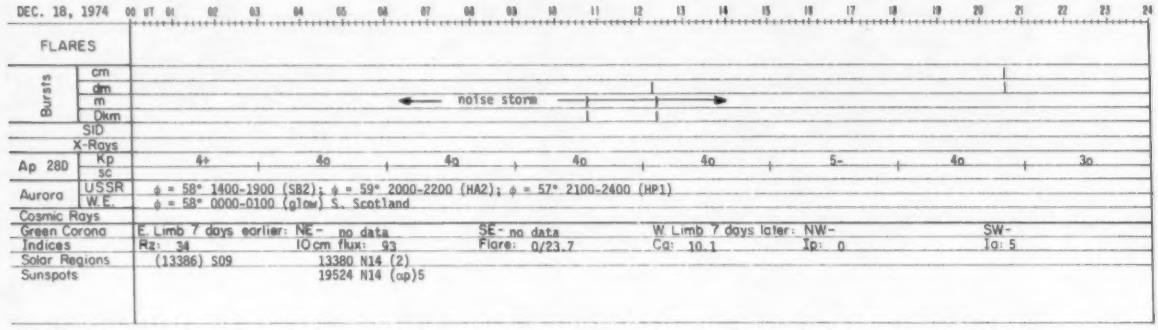
FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 21	Kp	3- 4- 3+ 4o 4o 3+ 4+ 2+
	sc	
Aurora	USSR	ϕ = 58° 0900-1000 and 1300 (HA1); ϕ = 58° 1100-1200 (SB2)
	W.E.	ϕ = 58° (overhead ϕ = 64°-65°) 0320-0400 (RA) W. Atlantic
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- SE- W. Limb 7 days later: NW- no data SW- no data
Indices		Rz: 21 10cm flux: 79 Flare: 0/23.7 Ca: 1.8 Ip: 0 Ig: 6
Solar Regions		(13378) N09 (13372) N13
Sunspots		

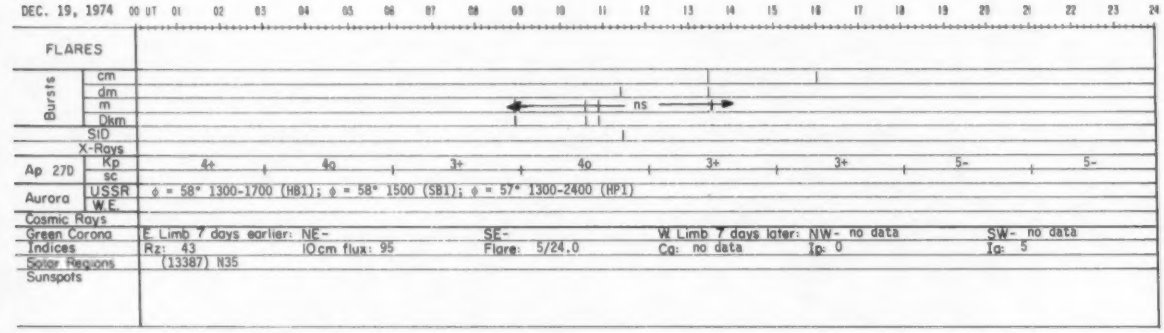
DEC. 12, 1974 00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FLARES		
Bursts	cm	
	dm	
	m	
	Dkm	
SID		
X-Rays		
Ap 18	Kp	3o 4- 4- 3+ 4o 3+ 2o 3o
	sc	
Aurora	USSR	
	W.E.	
Cosmic Rays		
Green Corona		E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- no data SW- no data
Indices		Rz: 31 10cm flux: 80 Flare: 11/24.0 Ca: no data Ip: 0 Ig: 5
Solar Regions		
Sunspots		


DEC. 13, 1974
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 22
Kp
3- 3+ 2o 2+ 4- 5- 5- 4o
sc
Aurora
USSR
W.E.
ϕ = 58° 1910-0015 (glow) S. Scotland
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- no data SW- no data
Indices
Rz: 34 10cm flux: 80 Flare: 0/23.5 Cq: no data Ip: 0 Ig: 5
Solar Regions
(13379) S09 13373 N12
Sunspots
19523 N11 (Bp)5
DEC. 14, 1974
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
1b/80
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 13
Kp
4o 4- 3+ 1+ 0+ 2o 3- 2+
sc
Aurora
USSR
W.E.
ϕ = 58° 0000-0015 (glow) S. Scotland; ϕ = 60° 0050-0200 (glow) N. Scotland
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- no data SW- no data
Indices
Rz: 33 10cm flux: 81 Flare: 23/24.0 Cq: 5.4 Ip: 0 Ig: 5
Solar Regions
Sunspots
DEC. 15, 1974
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 14
Kp
2o 3- 4- 3o 3- 3o 3- 3+
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- SW-
Indices
Rz: 35 10cm flux: 86 Flare: 0/24.0 Cq: no data Ip: 0 Ig: 5
Solar Regions
(13377) S04 (13381) S15
Sunspots
(19526) S15 Bf
DEC. 16, 1974
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
noise storm
Dkm
SID
X-Rays
Ap 800
Kp
2- 0+ 1+ 1o 1o 2+ 3+ 3-
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE-
Indices
Rz: 40 10cm flux: 91 SE- moderately bright Flare: 0/23.9 W Limb 7 days later: NW- Cq: no data Ip: 0 SW- Ig: 5
Solar Regions
Sunspots


DEC. 17, 1974
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 18
Kp
3- 4- 3- 2+ 2o 4- 4o 4+
sc
Aurora
USSR
φ = 59° 1600-1700 (R1R2-3); φ = 58° 1700-2100 (SB2); φ = 59° 2200-2300 (HA2)
W.E.
φ = 58° 2045-0100 (glow) S. Scotland
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- moderately bright
SE- moderately bright
W Limb 7 days later: NW- no data
SW- no data
Indices
Rz: 36
10cm flux: 91
Flare: 3/23.9
Cg: 5.4
Ip: 0
Ig: 0
Solar Regions
Sunspots


DEC. 18, 1974
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 28D
Kp
4+ 4o 4o 4o 4o 5- 4o 3o
sc
Aurora
USSR
φ = 58° 1400-1900 (SB2); φ = 59° 2000-2200 (HA2); φ = 57° 2100-2400 (HP1)
W.E.
φ = 58° 0000-0100 (glow) S. Scotland
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- no data
SE- no data
W Limb 7 days later: NW-
SW-
Indices
Rz: 34
10cm flux: 93
Flare: 0/23.7
Cg: 10.1
Ip: 0
Ig: 5
Solar Regions
(13386) S09
13380 N14 (2)
Sunspots
19524 N14 (αp)5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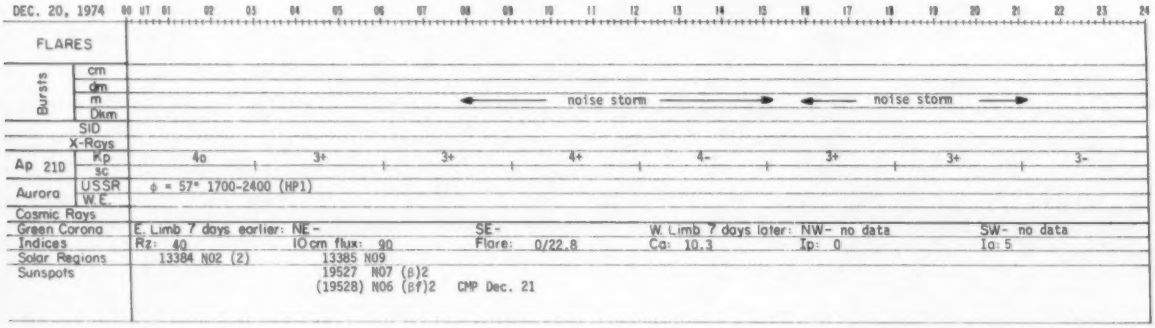
FLARES
Bursts
cm
dm
m
Dkm
ns
SID
X-Rays
Ap 27D
Kp
4+ 4o 3+ 4o 3+ 3+ 5- 5-
sc
Aurora
USSR
φ = 58° 1300-1700 (HB1); φ = 58° 1500 (SB1); φ = 57° 1300-2400 (HP1)
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE-
SE-
W Limb 7 days later: NW- no data
SW- no data
Indices
Rz: 43
10cm flux: 95
Flare: 5/24.0
Cg: no data
Ip: 0
Ig: 5
Solar Regions
(13387) N35
Sunspots


DEC. 20, 1974
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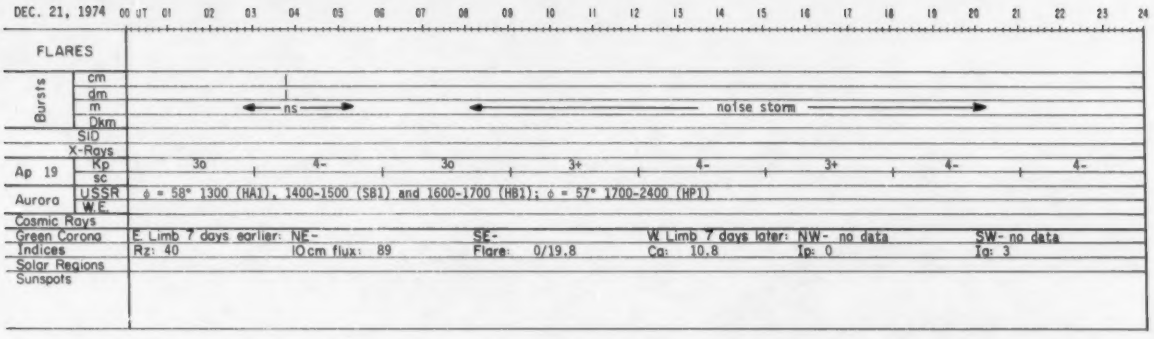
FLARES
Bursts
cm
dm
m
Dkm
noise storm
noise storm
SID
X-Rays
Ap 21D
Kp
4o 3+ 3+ 4+ 4- 3+ 3+ 3-
sc
Aurora
USSR
φ = 57° 1700-2400 (HP1)
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE-
SE-
W Limb 7 days later: NW- no data
SW- no data
Indices
Rz: 40
10cm flux: 90
Flare: 0/22.8
Cg: 10.3
Ip: 0
Ig: 5
Solar Regions
13384 N02 (2)
13385 N09
Sunspots
19527 N07 (β)2
(19528) N06 (βf)2 CMP Dec. 21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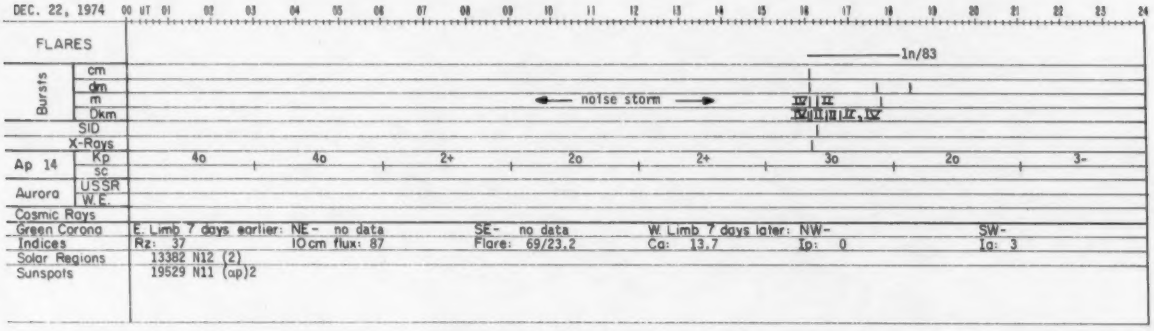
FLARES
Bursts
cm
dm
m
Dkm
ns
noise storm
SID
X-Rays
Ap 19
Kp
sc
3o 4- 3o 3+ 4- 3+ 4- 4-
Aurora
USSR
W.E.
ϕ = 58° 1300 (HA1), 1400-1500 (SB1) and 1600-1700 (HB1); ϕ = 57° 1700-2400 (HP1)
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E. Limb 7 days earlier: NE- SE-
W. Limb 7 days later: NW- no data SW- no data
Rz: 40 10cm flux: 89 Flare: 0/19.8 Ca: 10.8 Ip: 0 Ia: 3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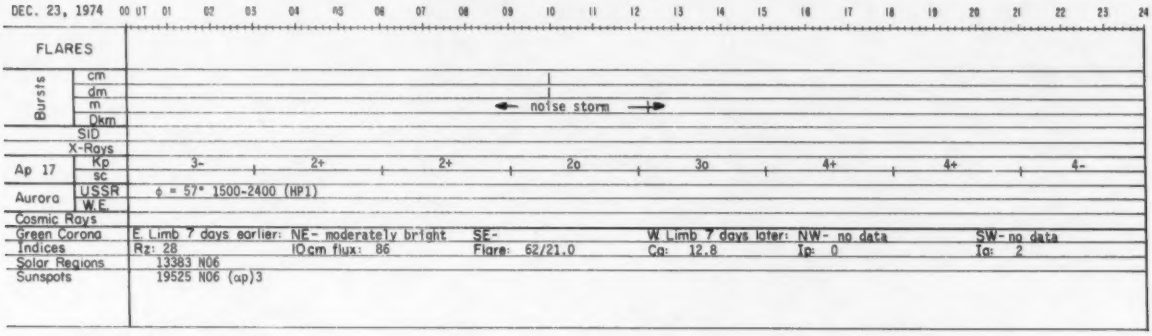
FLARES
1n/83
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 14
Kp
sc
4o 4o 2+ 2o 2+ 3o 2o 3-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E. Limb 7 days earlier: NE- no data SE- no data
W. Limb 7 days later: NW- SW-
Rz: 37 10cm flux: 87 Flare: 69/23.2 Ca: 13.7 Ip: 0 Ia: 3
13382 N12 (2)
19529 N11 (αp)2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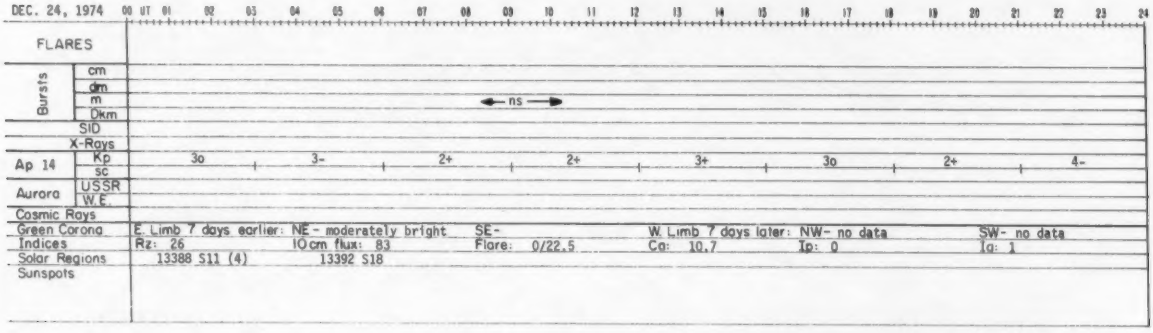
00 UT 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
FLARES
Bursts
cm
dm
m
Dkm
noise storm
SID
X-Rays
Ap 17
Kp
sc
3- 2+ 2+ 2o 3o 4+ 4+ 4-
Aurora
USSR
W.E.
ϕ = 57° 1500-2400 (HP1)
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E. Limb 7 days earlier: NE- moderately bright SE-
W. Limb 7 days later: NW- no data SW- no data
Rz: 28 10cm flux: 86 Flare: 62/21.0 Ca: 12.8 Ip: 0 Ia: 2
13383 N06
19525 N06 (αp)3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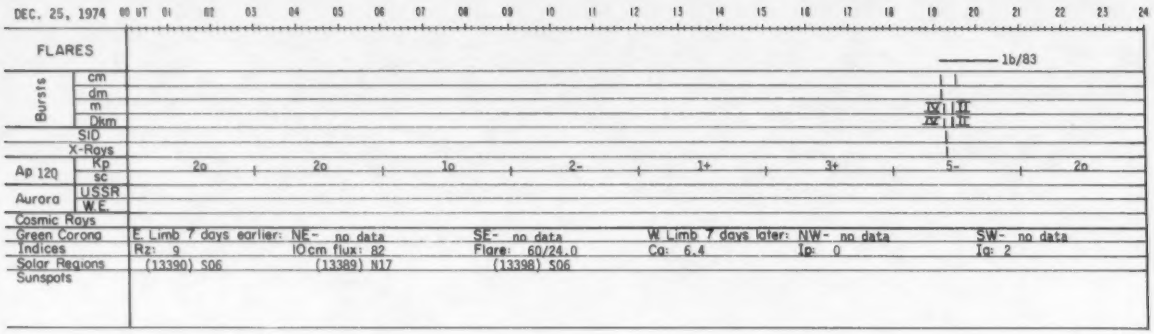
FLARES
Bursts
cm
dm
m
Dkm
ns
SID
X-Rays
Ap 14
Kp
sc
3o 3- 2+ 2+ 3+ 3o 2+ 4-
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
Indices
Solar Regions
Sunspots
E. Limb 7 days earlier: NE- moderately bright SE-
W. Limb 7 days later: NW- no data SW- no data
Rz: 26 10cm flux: 83 Flare: 0/22.5 Ca: 10.7 Ip: 0 Ia: 1
13388 S11 (4) 13392 S18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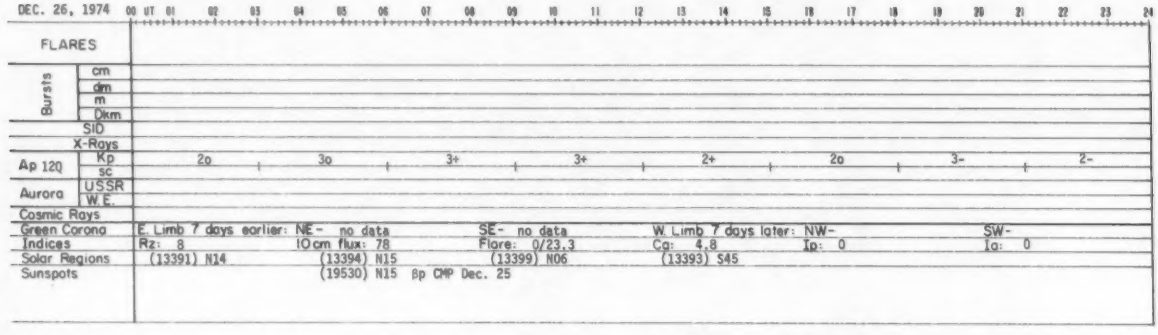
FLARES
1b/83
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 120
Kp
2o 2o 1o 2- 1+ 3+ 5- 2o
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 9 10cm flux: 82 Flare: 60/24.0 Ca: 6.4 Ip: 0 Ia: 2
Solar Regions
(13390) S06 (13389) N17 (13398) S06
Sunspots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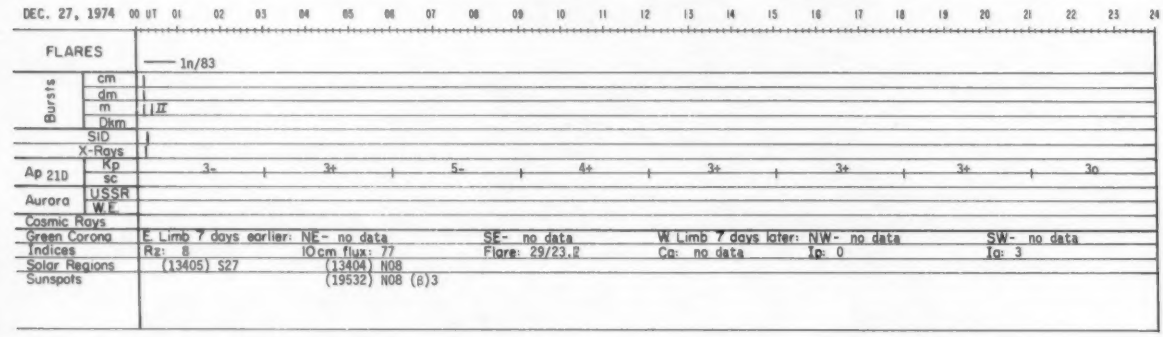
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 120
Kp
2o 3o 3+ 3+ 2+ 2o 3- 2-
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- SW-
Indices
Rz: 8 10cm flux: 78 Flare: 0/23.3 Ca: 4.8 Ip: 0 Ia: 0
Solar Regions
(13391) N14 (13394) N15 (13399) N06 (13393) S45
Sunspots
(19530) N15 βp CMP Dec. 25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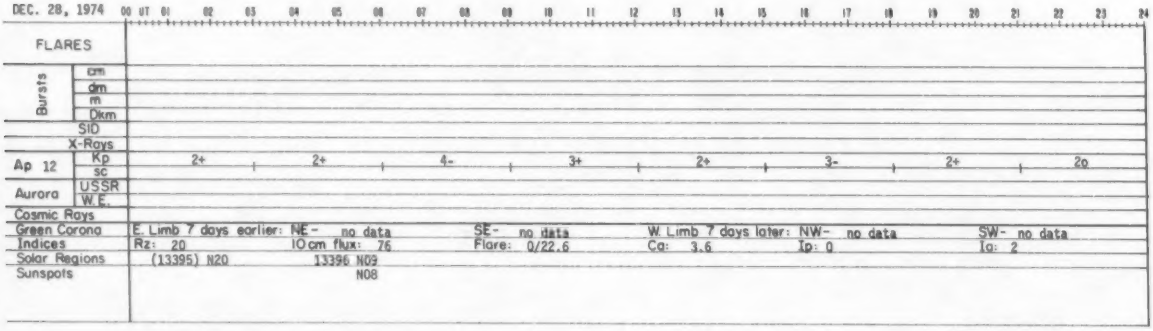
FLARES
1n/83
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 210
Kp
3- 3+ 5- 4+ 3+ 3+ 3+ 3o
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 8 10cm flux: 77 Flare: 29/23.2 Ca: no data Ip: 0 Ia: 3
Solar Regions
(13405) S27 (13404) N08
Sunspots
(19532) N08 (β)3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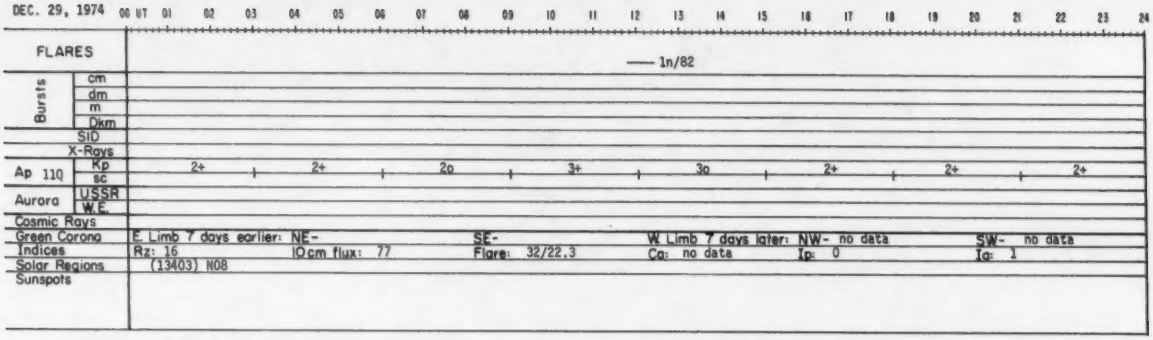
FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 12
Kp
2+ 2+ 4- 3+ 2+ 3- 2+ 2o
sc
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E. Limb 7 days earlier: NE- no data SE- no data W. Limb 7 days later: NW- no data SW- no data
Indices
Rz: 20 10cm flux: 76 Flare: 0/22.6 Ca: 3.6 Ip: 0 Ia: 2
Solar Regions
(13395) N20 13396 N09
Sunspots
N08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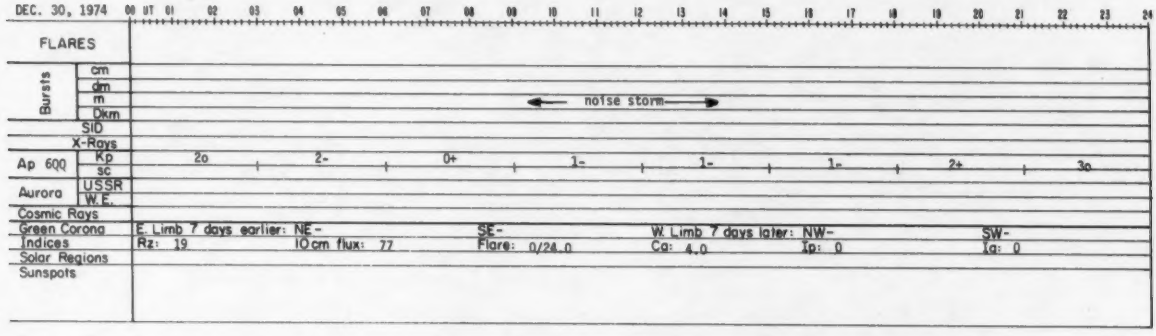
FLARES
1n/82
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 110
Kp
sc
2+ 2+ 2o 3+ 3o 2+ 2+ 2+
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- SE- W Limb 7 days later: NW- no data SW- no data
Indices
Rz: 16 10cm flux: 77 Flare: 32/22.3 Ca: no data Ip: 0 Ia: 1
Solar Regions
(13403) N08
Sunspots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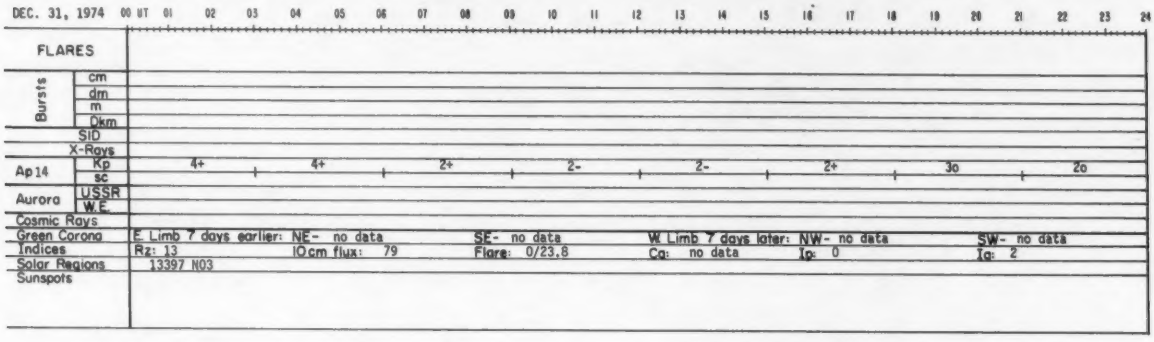
FLARES
noise storm
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 600
Kp
sc
2o 2- 0+ 1- 1- 1- 2+ 3o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- SE- W Limb 7 days later: NW- SW-
Indices
Rz: 19 10cm flux: 77 Flare: 0/24.0 Ca: 4.0 Ip: 0 Ia: 0
Solar Regions
Sunspots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FLARES
Bursts
cm
dm
m
Dkm
SID
X-Rays
Ap 14
Kp
sc
4+ 4+ 2+ 2- 2- 2+ 3o 2o
Aurora
USSR
W.E.
Cosmic Rays
Green Corona
E Limb 7 days earlier: NE- no data SE- no data W Limb 7 days later: NW- no data SW- no data
Indices
Rz: 13 10cm flux: 79 Flare: 0/23.8 Ca: no data Ip: 0 Ia: 2
Solar Regions
13397 N03
Sunspots

REGIONAL FLARE INDEX

DECEMBER 1974

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
13373	N12	74/12/13.3	74/12/12	74/12/17	13.38	2.23	2
13380	N14	74/12/18.8	74/12/14	74/12/14	22.83	22.83	1
13382	N12	74/12/22.7	74/12/29	74/12/29	29.15	29.15	1
13383	N 6	74/12/23.8	74/12/19	74/12/27	225.06	25.01	6
13404	N 8	74/12/28.0	75/01/03	75/01/03	1.07	1.07	1

Note:
The Regional Flare Index and count of flares in each region has in previous months included each maximum of a multi-maximum event. This has caused some regions to appear to be more flare producing than is probably warranted. Beginning with April 1972 only the principal maximum of a multi-maximum event will be used in the calculation. Also note that only the Confirmed Events as selected for the "I.A.U. Quarterly Bulletin on Solar Activity" are included in the calculation.

Because of differences in method of calculation, the dates of Central Meridian Passage for the McMath Plage Regions vary somewhat from those given elsewhere. Any region not listed here produced no confirmed flares during its disk passage.

MISCELLANEOUS DATA

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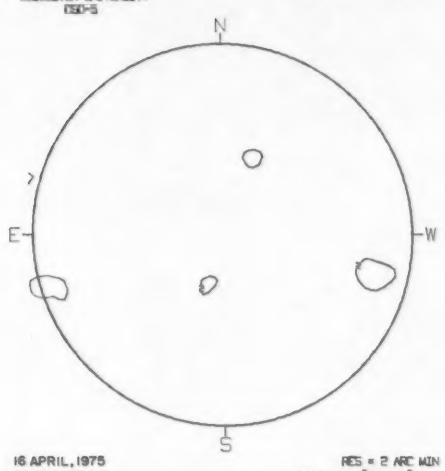
Daily Solar Activity Centers
X-ray - OSO-5 -- April 1975 24

APRIL 1975

UNIVERSITY COLLEGE LONDON
LEICESTER UNIVERSITY
OSO-8

3·6-11·1Å X-RAYS



16 APRIL, 1975
0048-0156 UT

RES = 2 ARC MIN
UNIT = 10^{-6}ERG/CM^2/SEC

No activity was shown on the maps drawn for the month of April 1975 at the followinn times:

Day	Time	Day	Time
1	0350-0445 UT	17	0046-0145 UT
3	0146-0247	18	0520-0605
4	2311-0048	19	0812-0915
5	2350-0050	20	0359-0457
7	0549-0628	21	0431-0528
8	0517-0615	22	0446-0528
9	0544-0626	23	0433-0515
10	0451-0550	24	0631-0813
11	0110-0219	25	0117-0300

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